SOUTH CAROLINA COMMUNITY BLOCK GRANTS FOR EDUCATION PILOT PROGRAMS

Pursuant to Proviso 1.94, 2014-15 General Appropriations Act

SC EDUCATION OVERSIGHT COMMITTEE

PO Box 11867 | 227 Blatt Building | Columbia SC 29211 | WWW.SCEOC.ORG

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Acknowledgements

The Education Oversight Committee (EOC) staff expresses its appreciation to the following who provided input for this report:

Students and teachers in the school districts of Beaufort, Charleston, Clarendon 1, Colleton and Jasper that participated in the block grant projects; and

Community partners in the school districts Beaufort, Charleston, Clarendon 1, Colleton and Jasper that provided enrichment and extended learning activities for the students and teachers.

I. Introduction to the Community Block Grants Program

The South Carolina General Assembly created the South Carolina Community Block Grant for Education Pilot Program by Proviso 1.94 in the 2014-15 General Appropriation Act (Appendix A.). The purpose of the proviso was to encourage and sustain partnerships between a community and its public school district for the implementation of innovative, state-of-the-art education initiatives and models to improve learning. Any public school, including a charter school, was eligible to submit a grant application. The proviso asserts that the success of the grant program is best served when there is vigorous community support, which is integral to the development and implementation on innovative initiatives for young people.

Research also suggests when schools, families, and community groups work together to support learning, children tend to achieve higher academic success, stay in school longer, and enjoy school more. Key components of successful extended learning programs are strong leadership from all partners involved, coordination that fits the local context, effective use of data, and a comprehensive approach to quality. (Browne, 2015).

The intent of the proviso is to encourage public school districts and district entrepreneurial public educators to undertake state-of-the-art initiatives to improve student learning and to share the results with the state's public education community. Although community partnerships were the focus of the grant, school districts were the lead agencies on the grant were directed by proviso to provide reports, summaries and items for the evaluation component of the grant.

Through this proviso, one million dollars was allocated for the block grants with direct allocations to school districts. One hundred percent of the funds were allocated to school districts. No grant award was to exceed $250,000 annually unless the grants committee found that exceptional circumstances warranted exceeding this amount. Grants awarded were to be implemented for a period of one year beginning July 1, 2015 until June 30, 2016.

"An independent grants committee oversaw the application and selection."

The grants program required a match from a school district. The match required from a school district was based on the poverty of the district or school. The poverty index used to determine the required match was based on the 2013-14 free and reduced lunch percentages and Medicaid eligibility index as determined by the poverty index data files from the South Carolina Department of Education. (S.C. Department of Education, 2014).

The matching amount by a school or district was to be no more than 70 percent and no less than ten percent of the grant request. The required match could include in-kind donations or funds. The poverty index of a school district or school was used to determine the match required. A sliding scale was used with a requirement that higher poverty districts and schools required document a lower match than schools with less poverty.

Public school districts and schools with high poverty and low achievement received priority for grants when their applications were judged to meet the criteria established for the grant program.

Per the proviso, the Education Oversight Committee (EOC) was charged with reviewing the grant reports submitted upon completion of the grant period and examining of the implementation initiatives/models. The EOC is also responsible for highlighting the accomplishments and identifying common challenges of the initiatives in order to share the lessons learned with the state's public education community.

II. Community Block Grants Committee

The Executive Director of the EOC appointed a block grants committee whose responsibility was to develop the process for awarding the grants including the application procedure, selection process and matching grant formula. The grants committee was to be composed of seven members, three members to be selected from the education community and four members from the business community. The chairman of the grants committee was to be chosen at the first meeting of the grants committee. It was the responsibility of the grant committee to review grant applications and select the recipients of the Community Block Grants for Education Program. The final decision on grant awardees was made by the review committee.

The grants process began with the selection of the seven-member independent grant committee in November 2014. The committee members selected are shown in Table 1 below.

Table 1
Grants Committee Members

Name	Category	Affiliation
Dr. Allison Jacques, Chairman	Education	University of South Carolina
Mr. Scott Price	Education	SC School Boards
Mr. Hayes Mizell	Education	Learning Forward
Mr. Dennis Drew	Business	TREE, LLC
Ms. Ann Marie Stieritz	Business	New Carolina-S.C. Council on Competiveness
Ms. Martha Scott Smith	Business	AT&T
Mr. Carlos Primus	Business	Colonial Life

III. Overview of Community Block Grants Process

The initiatives and models funded by the grant were to be well designed, based on strong evidence of effectiveness, and have a history of improved student performance. (See Appendix B for grant application.)

The criteria for awarding the grants were:

1. continuation or establishment of a robust community advisory committee to leverage the funding, expertise, and other resources to assist the district or school throughout the implementation of the initiatives;
2. a demonstrated ability to meet the match throughout the granting period;
3. a demonstrated ability to implement the initiative or model as set forth in the application; and
4. an explanation of the manner in which the initiative supports the districts or school's strategic plan.

In addition, the district or school with input from the community advisory committee included:

1. a comprehensive plan to examine the delivery implementation and measure impact of the model,
2. a report on implementation problems and successes and the impact of the innovation of the model; and
3. evidence of support for the project from the school district administration.

The initial meeting of the grant committee was held on December 16, 2014 for the purpose of reviewing the intent and specifics on the proviso, developing and approving the proposed timeline, grants application and criteria. (See Appendix C for timeline.)

Based on directions from the grants committee, news releases were disseminated on December 18, 2014 to school districts, education and community partners, school improvement councils, chambers of commerce, and faith based organizations in South Carolina to inform them of the grant opportunity.

Letters of invitation to include the grant applications and the process for submitting grant applications were emailed to all school district superintendents and public information officers in South Carolina on January 5, 2015 with the deadline for submission of the grants February 14, 2015. (See Appendix D for letter of invitation). The grant committee received thirty-seven grant proposals.

The grants committee met two additional times on March 6 and March 27, 2015 to review the grants submitted, determine the finalists for consideration, interview the finalists and make final determinations on the grant recipients. (See Appendix E for grant reviewer's evaluation form.)

The grants committee made the decision to award ten additional points to each grant for any district that had a poverty index of 90 percent or above and an Absolute Rating of Below

Average or below in order to meet the requirement of schools with high poverty and low student achievement receiving priority during the judging of the grant applications.

Based on the discussions and consensus of the grants committee a total of five grants were awarded. Grant recipients were notified on March 31, 2015. (See Appendix F for news release).

All districts notified of the grant award accepted. Districts completed an assurance award letter confirming their participation. (See Appendix G for assurance letter.)

The grants awarded by school district are described in the Table 2 below.

Table 2
Community Block Grants Recipients

District	Beaufort	Charleston	Clarendon 1	Colleton	Jasper
Project Topic	Beaufort Community Learning Program-Extended learning day	Charleston Promise Neighborhood Learning Community –Extended learning day through STEAM	STEM, Project-based Learning and AVID (Advancement Via Individual Determination)	Robotics with First Lego League	STEM 5E Model
School(s) Poverty Rating	82.5%	99.5%	98.2%	89.3%	87.9%
Number of Schools involved in the Project	(1) Beaufort Elementary	(2) Chicora Elementary (Partial magnet in communica-tions); Sanders Clyde Elementary (Arts magnet)	(1) Scotts Branch Middle and St Paul Elementary	(5) All elementary schools in district: Bells, Cottageville Forest Hills, Henderson, Northside	(1) Hardeeville-Ridgeland Middle
Grade Level	K-5	CD-5	6, 7, 8	4, 5	6, 7, 8
# Expected Students	100	1060	193	150	150
# Actual Students	52	264	187	93	94
% Actual vs. Expected Students Served	52%	25%	97%	62%	63%

Grant Amount Awarded	$163,500	$249,595	$242,237	$144,668	$200,000
Matching Funds as self-reported	$67,400	$370,559	$37,000	$77,000	$61,000

IV. Summary of Grant Projects

The approach to the evaluation focused on the following aspects of the community block grants.

- The implementation of the initiatives.
- The models to understand the delivery of services.
- The contextual factors that may contribute to the success of the project.
- The sustainability of the grant projects.

To evaluate these program features, three sources of information were utilized.

1. Interviews: On-site interviews were conducted with each grant manager and follow up telephone interviews were held upon completion of the project.
2. Site Visits: Site observations were conducted at each site in the beginning January, 2016. Each site visit was based on the specific intents of the grant.
3. Data: Student, parent and teacher data, as appropriate, were self-reported and submitted directly from each site. Consequently, there is no independent verification of the data. Each grant had a different set of goals requiring different metrics to assess the goals.

This section of the report summarizes each grant recipient's project by providing an introduction to the project, its background, a presentation of findings, challenges, and successes. Each grant had a different focus for innovation and school improvement; therefore the summary for each grant varies based on the goals and implementation of the grant.

Beaufort County School District

Introduction

The Beaufort County School District partnered with an existing, nonprofit organization Beaufort Community Learning Program (BCLP), which is a neighborhood-based educational and tutoring support program. The BCLP was designed to improve student achievement and increase family and community engagement. The BCLP is the result of a strategic plan whereby the school district, the Beaufort County Board of Education, the Neighborhood Outreach Connection (NOC), Beaufort County Adult Education, City of Beaufort's Mayor's Office, and the Beaufort County Housing Authority came together to focus on the needs of its young people. These groups rallied around a singular objective to raise student achievement among students living in some of Beaufort's highest poverty neighborhoods.

Schools that succeed in engaging families and community partners share three key practices. They:

- focus on building trusting collaborative relationships among teachers, families, and community members,
- recognize, respect, and address families' needs, as well as class and cultural difference, and
- embrace a philosophy of partnership where power and responsibility are shared. (Henderson and Mapp, 2002).

The NOC was established by local retired business and community leaders who wanted to volunteer their time not only in establishing an outreach program for the community but also in volunteering their time to implement it. (See Appendix H for news article.) The NOC is embedded in the communities they serve and students and parents can conveniently access its services. The housing authority provided a place for NOC to house its learning center at each apartment complex identified for the project.

The project design addresses the academic needs of each student through a data-driven communication process involving the student's teachers, school administration, and the NOC. The project's objectives were to increase student achievement, increase family engagement, and increase positive behaviors that are associated with academic success.

Background

The Beaufort County School District identified Beaufort Elementary School to participate in the BCLP. The school is located on the Beaufort River and serves 537 students in pre-K through grade 5 with a poverty index of 86.5 percent. Two thirds of the students are minorities and the school remains a Focus School under the No Child Left Behind federal accountability model due to the gap between minority and non-minority academic achievement.

In order to get a clear picture of the students with the highest needs and based on where the students reside, the Beaufort School District used a geographic information system (GIS) to map the location of each student in the school. The district created an "academic achievement index" using student data on Measures of Academic Progress (MAP) in math and English/language arts. Based on the student deficit of learning on each indicator, each student was assigned a score. Students scoring up to one year behind in learning were assigned a score needing additional intervention. Students scoring more than one year behind were assigned a score needing intensive intervention.

By tracking the academic index of each child based on his or her address, the district was able to identify geographically the critical mass of students needing additional interventions. A critical mass of students was identified at three main sites: Marsh Point public housing apartments, Parkview public housing apartments, and a third area in a one-fourth of a mile radius of the school itself.

After reviewing the GIS data, the BCLP met with the school district, the Mayor's Office, the NOC and Beaufort Elementary to design a system of interventions for students identified. The group set up meetings in the three areas identified to ascertain how best to provide academic assistance, how to provide the services, where to provide them and when to provide them.

It was determined that it was more effective and efficient to provide the academic services in the very neighborhoods where the target population live providing a hub of academic support in the afternoon, weekends and during the summer. The project focused on two housing apartments located in the attendance zone of the school. The BCLP used certified teachers from Beaufort Elementary in the program, many of whom already knew many of the students. The project operated year round, providing 12.5 hours of academic support each week, and two hours each Saturday at a site within the housing apartments. Summer academic support was provided at the two housing apartments using a STEM (science, technology, engineering and mathematics) theme.

A total of 52 students participated in the project. The students who participated in the project are summarized in Table 3 below.

Table 3
Student Demographics

		Race		Gender	
	Total Students	**African American #/%**	**White #/%**	**Female #/%**	**Male #/%**
Marsh Point	31	30/96.7%	1/3.2%	19/61.3%	12/38.7%
Parkview	21	21/100%	0/0%	12/57.1%	9/48.9%
Total	52	51/98.0%	½.0%	31/59.6%	21/40.4%

Source: J .Leadem, personal communication, August 15, 2016.

The community advisory group, the Beaufort Community Learning Program, engaged over 190 community people in the design and development of the project. In addition, a survey and open forums were provided to community members to increase the input and feedback to BCLP into the design and development of the project.

The goals for the project were:

1. to increase by 50% the percentage of students performing on MAP in ELA;
2. to increase by 50% the percentage of students performing on MAP in math;
3. ninety percent of the students will improve school attendance;
4. students in the initiative will improve positive behaviors in the classroom as measured by disciplinary actions; and
5. eighty percent of the students will have at least one family member attend a literacy night, workshop or support service.

The Neighborhood Outreach Connection (NOC) took the lead role in the organization and implementation of the grant project led by retired business and community leaders. Developing a strong relationship with the teachers and administration of the school was stated as a critical component of getting the program started.

In order to improve student behaviors, the NOC core values of honesty, respect, and hard work were emphasized within the program and directly taught by the teachers. Students were expected to practice these skills each day while at the extended learning center and at school.

Given the high-risk nature of the student population, consistent attendance by the students was deemed to be critical to program success so an environment of rewarding attendance via an incentive program was established. The incentive program was offered for both attendance and good behavior. Students who attended each day and demonstrated good behavior received a star. At the end of each week, if the student had a star for each day, then the student had the opportunity to pick a prize from the treasure chest. In addition, throughout the year students with 90 percent attendance received a McDonald's Happy Meal ticket.

Parent and family involvement was seen as a critical component for "buy in" to the program. Adults were offered information and assistance regarding continued education via adult

education. Families were offered health care via a Beaufort Memorial Hospital Healthcare Mobile Wellness Unit and DHEC for free health screenings.

The NOC had an open door policy for families/parents and scheduled four social events involving the families and friends and supporters of NOC, such as open house events and a holiday ceremony and distribution of gifts. A local women's organization provided holiday gifts for the students. These events helped to build better relations with the families living in the housing apartments.

Certified teachers conducted the after school, summer and Saturday learning sessions with a focus on literacy, homework and individual tutoring and general academic improvement in a computer lab. Students rotated among the components daily. During the school year, students were transported to their home by the district and walked to the NOC learning center located within the apartment complex.

Because of the early success seen by NOC, the project also piloted preschool and middle school programs at Parkview and Marsh Pointe, which were outside the responsibility of the grant, based on the success seen with the elementary students. Each Saturday morning, three and four year olds participated in an hour-long learning session provided by a NOC teacher and middle school students were invited to the afterschool program.

Presentation of Findings

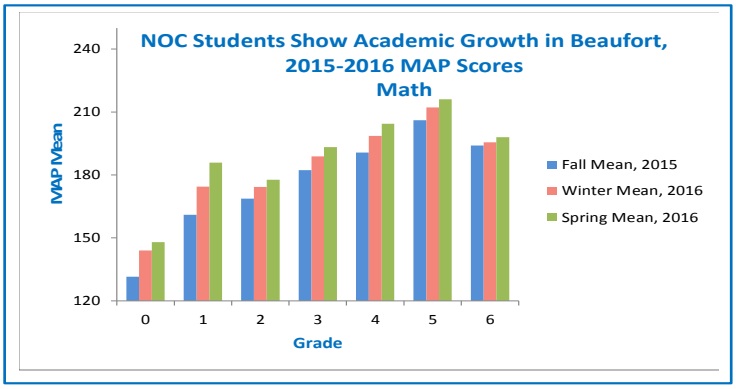
Academics

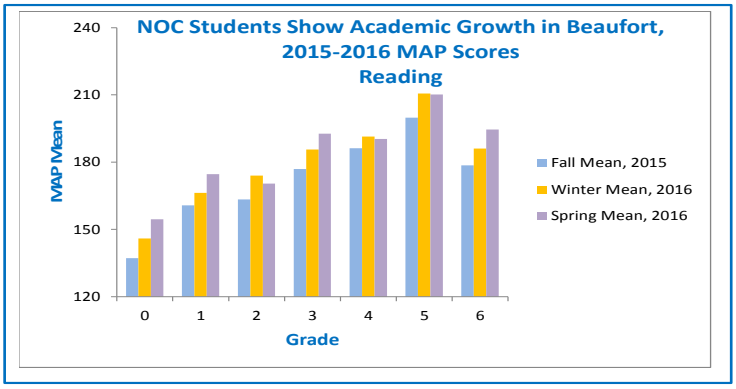
The students in the NOC program were tested with Measures of Academic Progress (MAP) which is a computer adaptive test administered three times during the school year in English language arts and mathematics. The results are shown in Figure 1 below.

Figure 1

Attachment A

NOC Students in Beaufort Show Academic Progress
2015-2016 Academic year





Source: BCSD

Figure 1. **MAP Scores of Students in NOC Program** *Source: Beaufort County School District, 2016*

Based on the MAP data from 2015-16, the academic achievement for the students in the NOC students showed gains in every grade level in the subjects of English/language arts and mathematics.

Attendance

The average attendance by site is summarized in Table 4 below. The attendance at Marsh Point was 82 percent and Parkview 72.2 percent.

Table 4
Attendance Summary at the Program Learning Sites

	Number of Students	**Mean Weekly Attendance in by Student**	**Average Weekly Attendance**
Marsh Point	30	24.6	82.0%
Parkview	22	15.9	72.2%

Source: J. Leadam, personal communication, August 15, 2016

School level attendance data was not provided.

Behavior

Due to a strong working relationship between the teachers and administration at Beaufort Elementary School and the NOC staff, strong lines of communication were established. The impact on student behavior has resulted in a structured environment conducive to actual learning time. The behavioral/disciplinary program has shown itself to result in very few if any outside issues caused by the NOC students as reported by the Beaufort Elementary School principal. The principal stated,

> " the NOC team in Beaufort interacts daily with the staff at Beaufort Elementary. We're so pleased with the support we get from NOC and the help they give our students and families. They focus heavily on tutoring, helping with literacy and homework skills, so our students are better able to master state standards and experience success in school. For families to get this level of support after hours-and right in their home community-is just wonderful."

School disciplinary referrals were not provided.

Family Involvement

Data related to the family engagement components of the grant were not provided.

Challenges

1. According to the school district, this project was the first time an outside agency had "set up shop" within the housing apartments to deliver educational services to parents and students. The foremost immediate challenge for the NOC at the outset was establishing a relationship of trust with the communities in the Parkview and Marsh Pointe neighborhoods. Nearly 100 percent of the residents at Marsh Pointe are single mothers and over 85 percent of households at Parkview are headed by a single parent, typically a female. The significant majorities of the

children experience the burden of poverty on learning and are in the lowest 25th percentile of the Beaufort Elementary School. As this was the first time that an outside organization has embedded itself in the neighborhood environment, it was critical to quickly develop trust and a relationship with the children, parents/guardians, and residents.

2. Another challenge reported by the grant recipient was the need to create a strong partnership and working relationship among the NOC, the Beaufort Elementary School, the Beaufort County School District, and the apartment management group, along the families of the children participating in the program. It was evident from the outset that if a strong learning culture in the community was to be established that a parental involvement was necessary to become a centerpiece of the initiative. Performance, attendance, and personal responsibility (behavior) needed to be grounded by a trusting relationship and connection with the families and community.

Figure 2

Figure 2. The students, teachers and project manager at NOC at the end of an afternoon session.

3. A third challenge was the transitory nature of many of these households as several of the "original" families moved away from their respective neighborhoods so that the students can no longer attend sessions at the learning centers. There is a need to constantly and diligently recruit new students to back fill the places left by the departing families as well as seeking to provide other resources for students who have moved.

4. Student data needed to align with the goals was not submitted. School attendance data was not submitted. Antidotal information was shared regarding student behaviors but data to support the opinion was not shared. Parent attendance for attending events was not shared.

Successes

1. The relationships developed through NOC working directly with the families in the housing apartments appears to have created a high level of trust and to have built a network of cooperation and communication which should serve everyone involved as this project continue on for a second year.

These relationships have strengthened the bond with the community and the residents of both neighborhoods and should be the basis for creating and sustaining additional common goals in the future.

2. One unforeseen obstacle which turned into a success was the overall lack of self-esteem and discipline as trait gaps of the children. This dynamic was and continues to be addressed on a daily basis by the staff. The students were expected to attend NOC ready to behave and dedicate themselves every day to a productive learning environment. It was found that these traits needed to be taught and modeled for the students. Respect for the teachers and for each other was stressed and rewarded. Incentives for rewarding this behavior were also included as part of the plan.

It is now the expectation that consistent attendance and excellent behavior are the standards throughout the program. The strong communication established between NOC and the school has assisted in facilitating the development of student's self. This dynamic has spilled over to their elementary school, where the NOC has established a strong and recognizable presence.

3. The MAP scores indicate the students who participated in the NOC afterschool activities showed strong gains at the end of the school year. The school district reports the NOC students' academic gains were greater than the non-NOC students. The scores suggest the NOC may have played a role in the higher achievement levels of the students. Caution should be taken when making these comparisons due to the low numbers of students in the program as well as other intervening factors not accounted for.

4. The overarching and current challenge for this project is the sustainability of the program going forward. At the end of the 2016 school year, the grant was completed. However, without a reliable source of continued private and public funding, the progress and accomplishments of the NOC program may be impeded. NOC is taking steps to mobilize support from the Beaufort community and additional funds will be required to raise capital to sustain and expand this Beaufort Project. NOC has begun a fund raising project to address the shortfall.

NOC has recently appointed two individuals from downtown Beaufort to join its Board of Directors to ensure a diverse geographical coverage in keeping with its strategic priorities. Along with this action, NOC has established an Advisory Committee with representatives from Beaufort to sustain and build its program, as well galvanize support for this program in Beaufort. NOC has reported they will continue this program for the 2016-17 school year with community support and donations.

5. The support of and interest in the NOC by the Beaufort Elementary School administration and the School District have been excellent and has contributed greatly to the overall success of the program. The NOC Program Manager has become a recognized presence in the hallways of the Beaufort Elementary School and the "bridge" between the BES and the NOC is firmly established. The presence of teachers from Beaufort Elementary has played a significant role in the favorable outcomes of this project.

While the community organization indicates more work is needed and will continue to be striving towards this goal, a greater working relationship between the school and the students it serves has been established in these neighborhoods.

6. As a result of the energy and excitement of NOC, other agencies and community groups joined to support the goals of NOC. The partnerships have grown in downtown Beaufort to support the high-risk students in the community.

Clarendon School District One

Introduction

Project Description

The project is an innovative approach to exposing 6th-8th grade students to Science Technology Engineering and Math (STEM) using the problem-based learning approach; to prepare students for college and career readiness classes through the components of Advancement of Individual Determination (AVID); and to provide effective teaching by providing professional development for middle school teachers.

The project centers around the use of academies that focus on environmental science. The academies are "Bridge" for grade 6 and "STEM" for grades 7 and 8. The academies offered varied opportunities for middle school students to engage in deeper learning that was embedded in sound, research-based principles of project-based learning and student engagement.

Project Goals

Goal I: Produce career and college ready students in Clarendon School District One through the creation of Bridge (grade 6) and Scott's Branch Middle School 21st Century Academy of STEM (grades 7-8) academies.

Goal II: Increase student achievement in math and science through problem-based learning, school engagement and attendance, and improvements in classroom behavior and school attendance.

Goal III: Provide relevant professional development to Clarendon School District One's middle school teachers that is driven by the district's mission and local professional development plan and is aligned with national professional development standards.

Project Components

- Advancement Via Individual Determination (AVID): Creates a college and career ready culture among students and increase student motivation and achievement. Middle school students participate in the AVID school wide plan using AVID binders and Cornel notes to improve writing, inquiry, collaboration, organization and reading skills.

- Project-based Learning (PBL): A unique approach to learning that is contextual, authentic, and collaborative. Students collaborate on meaningful projects that require critical thinking, innovation, and communication in order for them to answer challenging questions or solve complex problems.

- Authentic assessment: Grade level appropriate presentations that assess student knowledge of academic content and utilize real life skills.
  -6th grade: STEM Fair
  -7th grade: Multimedia presentation

-8th grade Capstone project with presentations

Background

Clarendon School District 1 focused this project on students in grades 6th, 7th and 8th with the 6th grade at St. Paul's Elementary School and 7th and 8th grades at Scott Branch Middle School. The last state report card Absolute rating for St. Paul's and for Scott's Branch Middle was Average. The most current federal report card rating was a score of C for the elementary and B for the middle school. Math performance for the elementary and middle school showed 40.1 percent and 38.7 percent of the students scored Not Met on the state math assessment, respectively. Science performance for the elementary and middle school showed 55 percent and 34.1 percent scored Not Met on the state science assessment, respectively.

The demographics of the students who participated in the project are provided in Table 5 below.

Table 5
Student Demographics

Student demographics							
2015-16 School Year	**Total**	**Male**	**Female**	**African-American**	**Native American**	**Hispanic**	**White**
Grade 6	70	38	32	66	0	2	2
Percent		54.3%	45.7%	94.3%	0.0%	2.9%	2.9%
Grade 7	56	31	25	51	0	1	4
Percent		55.4%	44.6%	91.1%	0.0%	1.8%	7.1%
Grade 8	61	26	35	56	1	1	3
Percent		42.6%	57.4%	91.8%	1.6%	1.6%	4.9%
Total	187	95	89	173	1	2	9

Source: Clarendon School District 1, 2016

This STEM focused project established two academies (one for 6th grade and one for 7th and 8th grades) within the school district focusing on environmental science and providing learning experiences in STEM. The goal of establishing the academies was to increase student achievement in science and math. The initiative was also designed to implement a high-quality professional development model that will prepare teachers to deliver a comprehensive, challenging STEM education to students. Teachers implemented project-based learning in the science classes whereby opportunities for students were provided to work together on projects, learn to manage complex assignments, conduct research on an issue, and communicate to an external audience their results. Studies have proven that when implemented well, project-based learning (PBL) can increase retention of content and improve students' attitudes towards learning, among other benefits. (Barron, B., & Darling-Hammond, L. 2008). The academies in 6th, 7th and 8th grade provided opportunities for students to work in teams, manage complex work, communicate to an external audience, and conduct independent research.

Students' projects focused on issues and problems identified within the Summerton community. Sixth graders participated in an introduction to an environmental course and presented their end of the year project at a STEM fair. Seventh graders narrowed their focus to a specific environmental topic, participated in a learning project and showcased their work at an end of the year presentation. The eighth grade experience was similar to the seventh grade with the exception of the students being engaged in a capstone project with a partner organization that required them to provide a real world solution needed by the partner organization. (See Appendix I for rubric for oral presentation.)

Students, with the guidance of the teacher, determined the projects that were important to them. For example, one grade level was concerned that the local grocery store, Piggly Wiggly, was going to close leaving the community with no full service grocery store. The students developed questions regarding this issue, researched the reasons for the closure, developed alternative strategies and presented their findings to the local community, including Piggly Wiggly representatives. Other problem-based learning projects included building a compost bin and understanding why compost is important. Others tried to understand how greenhouses work and the effects of a local waste contamination issue.

All students were involved in the AVID program. AVID creates a college and career readiness culture and increases students' motivation and achievement. Students learn organizational skills and student skills, work on critical thinking and how to ask probing questions, participate in college and career readiness activities and participate in enrichment and motivational activities throughout the school year. A trained AVID facilitator in the district used the train the trainer model to ensure all teachers at the middle school have the skills to implement the AVID program.

The district already had an existing advisory board, New Tech/CATE, which was formed in 2011. The advisory board was composed of nineteen members with representatives of parents, military, business and industry representatives, community activists, teachers, and local government officials. The advisory group meets quarterly to monitor and advise the district on the implementation of this project.

In addition to the advisory board the district partnered with a number of outside agencies to assist with implementation of the project. A summary of the partnerships is provided in Tables 6 and 7 below.

Table 6
Partners for the Clarendon 1 Project

Partner	Expertise	Contributions/Service to the Project
F.E. Dubose Career Center	Students are provided opportunities to participate in work-based learning experiences, field trips, and service learning projects.	The career center and CSD1 have an articulation agreement whereby students receive skill based training and industrial certifications in the career clusters. There was an in-kind match for the use of the equipment for eight graders.
University of South Carolina Center for Science Education	Dedicated to the enhancement of STEM in schools that led to improved student performance.	CSE has partnered with CSD1 since 2009 through a math science partnership grant. The CSE provided professional development to teachers for the project.

AVID	Goal is to close the achievement gap by preparing all students for college and career readiness. Provides teachers with high yielding strategies that lead to improved student outcomes.	Has partnered with CSD1 since 2011. Program is designed to improve student problem solving skills, communication skills, and self-management skills with specific emphasis on note taking lecture retention, and critical thinking.
Santee Lynches Regional Education Center	Provided resources for materials and staff during summer program.	Has partnered with the district since 2011. The center has actively provided professional learning opportunities for teachers in science. Provided staff and materials for summer STEM program.
Partner	**Expertise**	**Contributions/Service to the Project**
NEW Tech/CATE Advisory Board	The advisory board provides information relative to current job needs and workforce requirements, placement and work-based learning opportunities, and specific program improvements.	The board was formed in 2011 from as a result of a school improvement grant from South Carolina Department of Education. Mission is to graduate all students ready for the workforce or college ready. In kind match is provided through mentoring, service learning, job shadowing, cooperative education, and school-based enterprise internships.
Scott's Branch New Tech High	The goal of New Tech is to have learning based on project-based learning in order for students think critically about the world around them and discover new ways of approaching today's challenges.	The high school became a New Tech high school in 2012. The high school worked collaboratively with the 7th and 8th grade STEM academics. Donated 50 laptops.

Source: Clarendon School District 1, 2016

In addition, other community-based partners provided resources and assistance to the project as outlined below.

<u>Partnerships with Community Organizations</u>

Meritor – Advisory Board, STEM Showcase
Save the Children Federation, Inc. – student interviews, STEM Showcase
S2TEM Centers – STEM Showcase; teacher professional development
Riley Institute – STEM Showcase
Santee-Lynches Regional Council of Governments – STEM Showcase
EPRE Consulting – STEM Showcase
IT-ology – technology integration for student projects, CYBER IT Day, and advisory board membership
Clarendon County Development Board – student projects and advisory board membership
South Carolina Department of Commerce – soft skill development, advisory board membership, STEM Showcase, student presentations
Humble Farm – horticulturalist experience, and seeds.

Table 7
Summary: Student Community Partners
Collaboration and Capstone Projects

Grade Title Level	Student Name(s)	Community Partner Name(s)	Project
8th	Student Names Omitted	Tony Cruz (local farmer)	A Flooding Frenzy for Farmers
8th	Student Names Omitted	Dr. Dumala-on (teacher from the Philippines), Mrs. Matterson-Bailey (teacher from Jamaica)	Climate Change
6th, 7th, & 8th	Student Names Omitted	Ms. Brenda Golden (South Carolina Department of Commerce), Mr. Robert Edwards (Meritor), Mr. Bernard Price (Save the Children Federation, Inc.), Mr. James Darby (Community Member), Ms. Kia Brown (Parent Volunteer), Dr. Robert Petrulis (EPRE Consulting, LLC), Ms. Janet Davis (Parent Volunteer), Mrs. Kimberly Little (It-ology), Ms. Jeanne Hartley (USC Center for Science Education), Mrs. Julie King (S2TEM Centers), Mr. Scott McPherson (Riley Institute), and Ms. Jenna Brown (Santee- Lynches Regional Council of Governments)	STEM Showcase* Projects (various titles)
8th	All 8th Grade Students	IT-ology	Cyber-IT Day: "Binary Conversion ; Cryptography" "Coding Star Wars Games Using JavaScript Blocks"

Source: Clarendon School District 1, 2016

Presentation of Findings

Data provided from the district in response to the goals for the grant are summarized below.

Student Performance

Students were administered a commercially available benchmark test, Case 21, over the course of the year-long project in the areas of English/language arts, mathematics, science and social studies. Case 21 is aligned at each grade level to predict college and career readiness. Results of the Case 21 benchmark exams are presented for grades 6th, 7th and 8th in Tables

8, 9 and 10 below.

The benchmark test is predictive in the sense that, if the state tests were given at the same time as the benchmarks, it is expected that student performance on the standards tested would be similar. It is important to note that the Benchmark exams are aligned to the curriculum scheduled to be taught during the preceding weeks. Therefore, the exams assess different subject matter each time they are administered, so their results may not be strictly comparable from one test to the next.

Further, the benchmark exams' primary function is diagnostic. Item analyses provided to teachers show each individual student's performance on each standard, affording the opportunity to review and reinforce learning in weak areas, targeted to individuals and smaller groups of students.

The exams were administered three times during the academic year, roughly at the end of each of the first three quarters. Previous year's results were unavailable.

Table 8
Grade 6 Benchmark Results

Grade 6 projected percent proficient			
	Benchmark		
Subject	1st	2nd	Final
ELA	25.0%	31.6%	28.3%
Math	16.1%	39.7%	20.3%
Science	48.1%	56.1%	50.0%
Social Studies	48.1%	54.8%	56.3%

Source: Clarendon School District 1, 2016

The 6th grade benchmark results from the final administration of the test indicates that only about one-fifth of the students were expected to achieve a proficient score on the ACT Aspire math test, and less than one-third will score as proficient in the ELA portion of the test. The science and social studies projections were more promising, with half of the students scoring proficient or above in science and more than half scoring proficient or above in social studies.

Table 9
Grade 7 Benchmark Results

Grade 7 projected percent proficient			
	Benchmark		
Subject	1st	2nd	Final
ELA	27.7%	28.3%	30.2%
Middle School	16.7%	30.0%	38.9%
Math	17.0%	17.0%	20.4%
Science	45.7%	42.3%	48.1%
Social Studies	54.3%	54.7%	54.7%

Source: Clarendon School District 1, 2016

Seventh grade results were consistent with those of the 6th graders, with about one-fifth of the students scoring proficient in math, less than one-third in ELA, and approximately half in science and social studies

Table 10
Grade 8 Benchmark Results

Grade 8 projected percent proficient			
	Benchmark Administrations		
Subject	1st	2nd	Final
ELA	40.7%	36.2%	29.8%
English 1	27.3%	9.5%	20.0%
Math	15.1%	26.7%	22.0%
Science	28.3%	40.0%	25.4%
Social Studies	34.0%	42.1%	55.9%

Source: Clarendon School District 1, 2016

Eighth grade results were consistent with the previous two grades, except in science, with only about one-quarter of the students projected to score as proficient.

Student attendance, promotions and behavior

Student attendance is shown in Table 11 below. In reviewing student attendance data as a reflection of time on task, the mean absences for grade 6 during the grant year was 2.2 days as compared to the previous year's absences of 2.9 days. During the grant period, seventh and eighth grade students missed more days at 4.4 and 4.2 days, respectively, than sixth grade. However, students in grade seven and eight showed less long term absences at 24 and 26, respectively, from the previous year.

Table 11
Student Attendance

	2014-15					2015-16				
	No. Stu	Days Absent	None	1-4 dys	More than 4	No. Stu	Days Absent	None	1-4 dys	More than 4
Gr 6	**49**	**2.9**	**9**	**30**	**10**	**70**	**2.2**	**19**	**40**	**11**
%			**18.4 %**	**61.2 %**	**20.4%**			**27.1 %**	**57.1%**	**15.7%**
Gr 7	**69**	**3.3**	**0**	**48**	**21**	**56**	**4.4**	**1**	**31**	**24**
%			**0.0%**	**70.6 %**	**30.9%**			**1.8%**	**55.4%**	**42.9%**
Gr 8	**63**	**2.6**	**8**	**42**	**13**	**61**	**4.2**	**2**	**33**	**26**
%			**12.7 %**	**66.7 %**	**20.6%**			**3.3%**	**54.1%**	**42.6%**

Source: Clarendon School District 1, 2016

Grade level promotions are shown in Table 12 below. Regarding overall student achievement for the year, a greater percentage of eight grade students were promoted with 80 percent, seventh grade with 75 percent and sixth grade at 70 percent.

Table 12
Student Grade Level Promotions

Grade Level	Total No. of Students	Percent Promoted	Percent Attending Summer School
6th	70	53%	47%
7th	56	75%	25%
8th	61	80%	20%
TOTAL	187		

Source: Clarendon School District 1, 2016

Student Engagement

Student engagement was measured by the district in several ways per the grant proposal. The first way was the number of students who participated in project-based learning opportunities**.** See Figure 3 below.

To showcase student projects and presentations to community members as part of the project-based learning requirements, students presented the results of their projects to community members. Table 13 below shows the community member participation. Students' names have been omitted due to privacy requirements.

Figure 3

Figure 3. Community and board members listen to 7th grade students' presentations on Piggly Wiggly

Table 13
Summary: Student Engagement in Project Based Learning Opportunities

Grade Level	Student Name(s)	Community Partner Name(s)	Project Title
8th	Student Names Omitted	Harvest Hope & United Ministries	Harvest Hope Mobile Food Pantry Project Service Learning

6th	All 6th Grade Students	Ariel McClain (horticulturalist) & IT-ology	Plant CSI & The Greenhouse
7th	All 7th Grade Students	IT-ology	Cyber-IT Day: "Google CS First" & "Littlebits"
8th	All 8th Grade Students	IT-ology	Cyber-IT Day: "Binary Conversion and Cryptography" & "Coding Star Wars Games Using JavaScript Blocks"
Grade Level	**Student Name**	**Community-based Partner**	**Project Title**
7th	Student Names Omitted	Bernard Price (Save the Children Federation), James Darby (community member), Brenda Golden (SC Dept. of Commerce), & Beatrice Rivers	Piggly Wiggly Project

Source: Clarendon School District 1, 2016

In the fall of 2015, the district measured student engagement in a second way whereby students in the 6th, 7th, and 8th grades were polled by the Gallup Organization. In all, 144 responses were tabulated and reported back to the school district. The survey results are broken into four subgroups: student engagement; hope; entrepreneurial aspiration; and career/financial literacy. The survey item responses were on a five-point scale from Strongly Disagree (1 point) through Strongly Agree (5 points), so a score of 3 would be neutral. The mean for each subgroup for the district and the nation are shown in Table 14.

Table 14
Gallup Poll Survey Results

National vs. District Gallup Poll Results n=144						
	District	**Nation**	**District**	**Nation**	**District**	**Nation**
	6th Grade	**6th Grade**	**7th Grade**	**7th Grade**	**8th Grade**	**8th Grade**
Engagement	4.47	4.19	4.09	3.98	3.84	3.81
Hope	4.45	4.36	4.61	4.30	4.44	4.24

Entrepreneurial Aspiration	3.11	2.69	3.21	2.55	3.16	2.42
Career/Financial Literacy	3.60	3.33	3.64	3.27	3.35	3.21

Source: Clarendon School District 1, 2016; Gallup, 2016

The overall results indicated slightly more positive perceptions on the part of Clarendon 1 middle school-aged students when compared with the U.S. national results.

Teacher professional Learning

A third goal for the grant was to provide relevant professional development to the district's middle school teachers in order to implement the program. Middle school teachers participated in a variety of STEM based professional learning opportunities, including, but not limited to the following items listed in Table 15 below.

Table 15
Summary: Teacher Professional Learning in STEM

Date (Ex. 03/12/16)	Time	Location	Description of Professional Learning Opportunity
8/3/15 – 8/5/16	8:30 – 3:30	Scott's Branch Middle High School	Engage in the Science & Engineering Practices (SEPs); Teaching Through Drawing, Drawing to Notice, Analyze, and Evaluate; and Project vs. Problem Based Learning
Weekly beginning 9/21/15 - May 2016	8:30 – 3:30	Scott's Branch Middle High School	Science instructional support (7th & 8th grades)
11/2/15	3:30 – 5:00	Scott's Branch Middle High School	After-school standards and instructional strategies training (6-8 math & science)
Thursdays/Fridays beginning 11/18/15 - May 2016	9:45 – 11:00 & 12:30 – 1:30	St. Paul Elementary School	Co-teaching & science instructional support 6th grade teacher

Weekly beginning 11/30/15 - May 2016	8:30 – 3:30	St. Paul Elementary School	Math instructional support, co-teaching, co-planning, Professional Learning Community meetings with 6th grade teachers
12/16/15	3:30 – 5:00	Scott's Branch Middle High School	After-school standards and instructional strategies training (6-8 math & science)

Source: Clarendon School District 1, 2016

During the 2015 – 2016 school year, there were eight core area teachers for grades six through eight (i.e. math, science, social studies, and English Language Arts). Teacher participation in the summer institutes is included in table 16.

Table 16
Summary of Teachers' Participation in Summer Institutes

Training	Number/Percent of Participants
AVID	5 of 8/62.5%
Summer Institute: STEM, Literacy, Project-based Learning	4 of 8/50%

Source: Clarendon School District 1, 2016

Challenges

1. Although there were some teachers who were hired after the beginning of the school year, all teachers received professional learning opportunities throughout the grant period. The middle school teachers received in-class support from personnel at the University of South Carolina's Center for Science Education and/or the grant coordinator. Additionally, the teachers were involved in observations, co-teaching, and/or collaborative planning opportunities with personnel from the University of South Carolina's Center for Science Education and/or the grant coordinator.

Only one middle school science teacher had been employed when the training for science teachers was conducted in the July of 2015. The district made arrangements for the new teachers to receive the training during August after they were employed.

2. The grant proposed that 7th and 8th grade students would enroll in an elective 18-week AVID course and 6th grade students would enroll in weekly AVID classes. Due to scheduling conflicts and requirements for middle school students to enroll in physical education, health, and a technology course, changes to the AVID schedule for students were made to integrate the curriculum among existing classes for all middle school students. Since all middle school teachers ware trained in AVID strategies, a school wide approach to AVID was undertaken. The middle school teachers integrated the AVID strategies in the existing classes.

3. The sustainability of this project showed the AVID strategies initiated in the project would continue for 2016-17. Through the efforts of another grant, the district will continue with project-based learning as teachers have designed additional PBL science and math lessons during the summer, 2016 for implementation for 2016-17. Showcasing student projects with student presentations are planning for 2016-17.

Successes

1. According to the benchmark tests administered by the district, the results in grade 6 appeared to be more promising in science and social studies as the students' scores approached the 50th percentile. In grade 7, students appear to have made gains in the core academic areas, especially in science and social studies. Grade 8 students appear to have made gains in social studies only.

2. Student engagement opportunities were increased for all middle school students and the results of the Gallup poll indicate students scored higher than the national average on the components of student engagement; hope; entrepreneurial aspiration; and career/financial literacy.

3. Students participated in project-based learning in the middle school. The high school is a New Tech high school so the experience afforded to these students should make for an easier transition to this learning approach in future years.

4. Given that Clarendon 1 is a rural school district with limited business partners in the county, the number of partnerships and the expertise provided by the partners was exceptional.

5. Professional development opportunities for teachers to implement the grant were numerous and were conducted by capable consultants. In addition, the district ensured teachers who were unavailable for training in the summer of 2015 received the training.

Colleton County School District

Introduction

Colleton County School District implemented a First Lego League (FLL) ACErobotics program with an anticipated enrollment of 150 students representing all elementary schools in the district. The focus of the program was for students to build, design, test, and program robots. Student learning success would be determined by assessing student performance on math and science. In addition, the district wanted to focus on exposing more females and African-American students to the concept and real world application of engineering.

The target audience was approximately 30 students per elementary school and the program was open to 3rd, 4th and 5th graders. The robotics program enrolled students in a four week summer session in 2015 as well as in an afterschool program throughout the 2015-16 school year. The culmination of the program was for the students in each school to compete in a First Lego League (FLL) competition.

Background

Colleton County schools serves approximately 1200 students in grades 3, 4 and 5 countywide. All five elementary schools were involved in the project: Bells Elementary, Cottageville Elementary, Forest Hills Elementary, Hendersonville Elementary, and Northside Elementary. Collectively, the schools had an 89.28% poverty rating.

The most current district wide scores for all elementary students on the Palmetto Assessment of State Standards (PASS) Science scoring Not Met by grade level are shown below.

- grade 3 42 percent of students
- grade 4 35 percent of students
- grade 5 37 percent of students.

The robotics project was open to all elementary students in the county. Approximately, 95 students enrolled in either the yearlong or summer robotics program.

Students with weaknesses in math and science along with females and African-American students were recruited in hopes of increasing these two subgroups interest in math and science. Students participated in a month long summer program in 2015 as well as an afterschool program from September through May of the 2015-16 school year. Student participation is shown by demographics in Table 17 below.

Table 17
Student Participation and Demographics by School

		Race				Gender	
	Total	**African American**	**White**	**Hispanic**	**Other**	**Female**	**Male**
	Bell Street Elementary School						
	15	3	4	3	5	4	11
	Cottageville Elementary School						
	16	7	8	0	1	6	10
		Race				**Gender**	
	Total	**African American**	**White**	**Hispanic**	**Other**	**Female**	**Male**
	Forest Hills Elementary School						
	18	6	10	0	2	8	10
	Hendersonville Elementary School						
	24	22	2	0	0	12	12
	Northside Elementary School						

	20	13	7	0	0	15	5
Total # Students in Program	**95**	**51**	**31**	**3**	**8**	**45**	**48**
% of students in program		**55%**	**33%**	**3%**	**9%**	**48%**	**52%**

Source: Colleton County School District, 2016

Goals

The goals for the program were:

1. to improve students' and parents' satisfaction in the overall school's learning environment as measured by the annual parent-student survey;

2. to increase student performance for females in science by 5% as measured on the state PASS science exam; and

3. to increase student performance for African-Americans in science by 5% as measured on the state PASS science exam.

Implementation

FIRST LEGO League (FLL) introduces students to a scientific and real-world challenge for teams to focus and research. The robotics part of the competition involves designing and programming LEGO *Mindstorms* robots to complete tasks. The students worked out solutions to the various problems they are given and then meet for regional tournaments to share their knowledge, compare ideas, and display their robots. Research has supported the use of robotics for afterschool programs as means to teach science and math concepts. (Barker and Ansorge, 2007)

Each year FLL designs a challenge problem for all FLL members to work on. This year the challenge was Trash Trek. The student members were to identify a problem with the way we make or handle trash, design an innovative solution to the problem selected, and share the problem and solution with others. (See Appendix J for FLL robotics rubric).

Students in the FLL learn and practice core values as part of the program. The Core values are:

- We are a team.
- We do the work to find solutions with guidance from our coaches and mentors.
- We know our coaches and mentors don't have all the answers; we all learn together.
- We honor the spirit of friendly competition.
- What we discover is more important than what we win.
- We share our experiences with others.

- We display gracious professionalism and cooperation in everything we do.
- We have fun.

For the afterschool component of the robotic program, students met two to three times per week for approximately 2.5 hours. Transportation home was not provided.

Certified teachers, who acted as coaches and instructors, and assistants, from the New Tech program at Colleton High School, along with a First League Lego trainer implemented the program. The FIRST LEGO League trainer was also the program manager for all sites who served as the coordinator of the overall program as well as served as an advisor for the First League Lego competitions, trained the teachers and assistants and provided guidance and direction throughout the program. A certified teacher as well as an assistant coach was the facilitators at each school site along with an assistant.

Teachers and assistants participated in professional learning in the robotics programming and lesson plan development provided by the coordinator of the program manager during the school year. During the summer, the teachers and assistants participated in professional development training provided by First League Lego (FLL) training sites in North Charleston and Walterboro.

The professional development consisted of identifying the basic components of the robot and how to program it to do specific maneuvers. Teachers were also trained on how to access the Firmware software used in coordination with FLL, the use of the sensors and how to use the ports. Being able to identify the parts of the robot was also emphasized so that the coaches could teach the students how to build a robot using the FLL kit.

Professional development also consisted of how to get students ready for a competition, the rules of FLL and how to engage students in researching topics that were pertinent to the themes used by FLL.

As part of the First League Lego program, students participated in field trips to Boeing, BAE Systems, colleges, and other businesses with each using technology to showcase for students the opportunities in real world applications in robotics.

The robotics program used the First League Lego curriculum materials and consisted of:

Robot Building: Students were taught how to program machines for specific functions, design and build complex machines; work complex machines and troubleshoot problems with such machines. Specifically, students were training in the processes involving: brainstorming, problem solving, designing, blueprint reading, use of AutoCAD, animation skills, electronics/circuitry, construction/manufacturing, use of tools, web design, testing systems, strategy development, team building, time management, writing/speaking skills, and organizational skills.

Soft Skills Training: Clemson University Extension Services worked with the students on providing soft skills and leadership training using the curriculum, *Building of Tomorrow Youth Leadership Program* that is offered through modules. The modules used were team building, personal development, communication and leadership. The goals of the curriculum were to build youth skills in teamwork, leadership, decision-making, citizenship, life skill and enhance other positive social behaviors.

Volunteers and Mentorship: Volunteer engineers were to support and mentoring to students in their robot building exercise and in their competition. Students worked with experts in the field in learning and preparing for their competitions.

Robotics Competition: The robotics competitions allowed for students to integrate the skills learning in the design and building of the robots as well as the soft skills in communicating, working as a team and leadership. As part of the competition, students had to display communication skills orally by developing strategies with teammates and in written format for the presentation of the competition. Students had to display their knowledge of robotics if a problem arose by showing they could diagnosis and repair and the problem.

Presentation of Findings

Attendance

Student attendance was reported by the district at 95% for the combined summer and afterschool program.

Student Performance

The district reported academic performance in mathematics as measured by Measures of Academic Progress (MAP) showed 93% of African American students showed improvements on their MAP score, while 2% showed a decrease and 4% remained the same from fall, 2015 to spring, 2016.

No MAP scores were provided for females in the program.

Learning Environment

One of the goals was to improve students' and parents' satisfaction in their school's learning environment as measured by the South Carolina Department of Education annual parent-student survey. The results of the surveys given in 2015 and 2016 to teachers, parents and students are shown in Table 18 below.

Table 18
Comparison of results from learning environment survey from parents and students from 2015 to 2016

	Parents 2015	Parents 2016	Students 2015	Students 2016
Bells	72.8%	81.8%	67.5%	88.2%
Cottageville	75.0%	75.0%	90.4%	63.2%
Forest Hills	93.8%	94.4%	84.0%	98.0%
Hendersonville	81.8%	81.8%	96.0%	78.5%
Northside	90.0%	86.9%	82.8%	93.5%

Source: Colleton County School District, 2016; SC Department of Education, 2016

Challenges

1. One of the goals of the grant was to increase student performance for females in science by 5% as measured on the state PASS science exam. Student performance data for females was not provided to support this goal.

2. The district proposed implementing the Clemson Extension Services curriculum *Building of Tomorrow Youth Leadership Program* to assist with building youth skills in teamwork, leadership, decision-making, citizenship, life skill and enhance other positive social behaviors.

Because more time was devoted to the robotics portion of the afterschool program, the Clemson Extension program was not implemented. However, First League Lego has components built into the program that integrates many soft skills. The core values portion of First League Lego comprises the skills of inspiration, which includes discovery, team spirit, and integration; teamwork, which involves effectiveness, efficiency, and kids doing the work, and gracious professionalism, which includes inclusion, respect, and cooperation. In addition, other components of the First League Lego rubric emphasize presentation skills involving sharing creativity and presentation effectiveness.

3. Two schools had more students who wanted to participate than there were slots for students. The district attempted to identify funds for additional coaches but were not able to do so.

4. Transportation was not provided by the district and was a cause for some students not to be able to participate.

5. The data indicate it depends on the school as to whether students perceived the learning environment to have improved with three schools showing improvement.

Teachers also showed mixed results with three schools showed a decrease from the previous year. Parents' perceptions varied by school but overall remained constant from the previous year.

Successes

1. Within the first year of implementation of First League Lego, Colleton County placed three of its five teams in state competition. In addition, Colleton County was able to host a regional First League Logo competition in January, 2016 which enabled many parents and community members to see firsthand the work of the students.

2. The district reports that many students who were discipline problems in school were some of the most successful participants in the robotics program by taking leadership roles in FLL. Overall students were excited and motivated to be in the program.

3. The district is seeking other funding sources to continue the afterschool program in robotics for its students. The district has written various grants to sustain the program including a 21st Century Community Grant and a Palmetto Project Grant. The district sought and gained the commitment of Boeing and a second business to provide two engineers to come to two elementary schools to assist coaches and assistants in the district's efforts to sustain the robotics program in the 2016-17 year. The district reports it will continue the program for 2016-17.

4. The curriculum materials used in the project were of high quality and research-based.

5. The program was implemented with a high degree of fidelity as evidenced by having three of the five teams reach state competition during the first year. The adults in the program appeared to be committed to the project and were eager to assist students to practice the core value as well as implementing their robotic project.

Charleston County School District

Introduction

The Charleston County School District joined forces with a local public-private partnership, Charleston Promise Neighborhood Learning Community (CNLC), to expand innovative expanded learning for programs in STEAM (science, technology, engineering, arts and math). The CNLC is a partnership between the school district and The Charleston Promise Neighborhood, an existing non-profit organization. The Charleston Promise Neighborhood is modeled after the Harlem's Children Zone and seeks to transform a neighborhood within a generation. The goal is to decrease the learning and opportunity gap among student subgroups.

The grant program provided additional learning opportunities for students after school that were challenging and rewarding enrichment activities, assisted in academic support and provided organized play. Students would remain at school for approximately three hours after the school day ended to participate in academic and enrichment activities.

The schools involved were Sanders-Clyde Elementary School and Chicora Elementary School, both in high poverty neighborhoods. These schools have been identified as historically underperforming schools with the most recent 2014 state report card Absolute Rating of Below Average and a federal report card score of F at both schools. A total of 1060 students, which represented 100% of the students at the combined schools, were expected to participate in the year long expanded day school program.

Background

At the time of the grant award in April, 2015, the Charleston County School District had in place an employee who served in the associate superintendent role as the director of initiatives to coordinate activities between the school district and Charleston Promise Neighborhood. However in the summer 2015, the school district faced a large deficit in funding and the district funds allocated for the district department to oversee the partnership were eliminated. In addition, original funding allocated for the Charleston Promise Neighborhood was also reduced from at least one municipality.

The school district and the Charleston Promise Neighborhood (CPN) put in place a second administrative team to oversee the implementation of the grant composed of the director of community education, in charge of afterschool programs, from the school district and a program manager, responsible for education initiatives from the CPN. As a result of the restructuring and funds being reduced, the number of students to be served was decreased. The budgeted number of students was reduced from the original number to serve all students of 1060 to 760 students in August in order to provide appropriate student/staff ratio for academic support, supervision and expanded learning opportunities. The total number of students who reported in the program was 441.

As the year progressed, Sanders-Clyde enrollment remained constant at 177 students; however, Chicora enrollment numbers drastically decreased from initial expectations of several hundred to 108 to 43 students. Sanders-Clyde has a history of afterschool programs and parents have been utilizing this resource for their children for a number of years. For Chicora, one reason for the sharp decline was the Charleston County Constituent Board was made

aware that many students attending Chicora were out of their attendance zone. During the school year, students out of zone were made to attend the school for which they are zoned. Many of the students in the extended learning program were out of zone students.

A second issue at Chicora was the availability of other afterschool programs offered at the school, which competed for students. Many students had already enrolled in an after school program prior to the opportunity for the extended learning program. Finally, in the extended learning time program at Chicora some students were not allowed to return to the program due to inappropriate behavior being demonstrated while attending the extended learning program. See Table 19 below for the demographics of each school's enrollment. The demographic data reflect students who were enrolled 90 percent of the time.

Table 19
Demographic Data for All Students at Chicora and Sanders Clyde who Enrolled in the Extended Learning Program

		Race (#/percentage)				Gender (#/percentage)	
	Total #	African American	White	Hispanic	Other	Female	Male
Chicora	108	103/95.4%	1/0.9%	2/1.9%	2/1.9%	55/50.9%	53/49.1%
Sanders-Clyde	177	169/95.5%	0/0.0%	2/1.1	6/3.4%	88/49.7%	89/50.3%
Total	441						

Source: Charleston County School District, 2016

The expanded day learning model added three hours to the school day and consisted of enrichment time for: activities related to science, technology, engineering, arts and mathematics (STEAM); targeted academic tutoring/support; provision of snacks/dinner; and transportation home. The academic tutoring and support consisted of certified teachers assisting students with homework and struggling readers assigned to the *Reading Partners* program (at Sanders-Clyde only) for specific reading support.

The goals for the grant were:

1. to improve student achievement through a STEAM model expanded day program;
2. to improve community involvement in planning and implementing the model; and
3. to implement a sustainable, high, quality collaborative program.

A community advisory committee, Charleston Promise Expanded Learning Community Advisory Committee, formed in 2013-14 was utilized as the primary source for partnerships as well as guidance for the planning and implementation of the grant. The advisory committee was a 25 member committee that included faculty from higher education, School Improvement Council members, parents, business leaders, and representatives from community-based organizations.

The advisory committee along with the grant staff identified potential enrichment partners to implement the STEAM portion of the grant. The district released a Request for Proposals (RFP) to recruit and select qualified partners to provide the STEAM activities. The RFP process provided a vehicle to consistently apply qualifications to all partners by standardizing the requirements for participation such as quality of the program, the skills to be taught, their alignment and approach to the skills being taught, curriculum used, and budget capacity. As part of the contract as an enrichment partner, each vendor agreed to 15 hours of training by the

CPN. The partnerships for each school that provided enrichment activities for students are listed in Table 20 below.

Table 20
Enrichment Partners

Enrichment Partners	
Sanders Clyde	**Chicora**
CHEEFS	Charleston Museum
Coastal Lacrosse	CHEEFS
Soccer Shots	Citadel Young Authors
Historic Charleston Foundation	Bricks 4 Kidz
REDUX	Corpus Callosum
YMCA	Historic Charleston Foundation
Citadel Young Authors	Storytree
Green Heart	Coastal Lacrosse
DanceED	DanceED
Corpus Callosum	Wings
Wings	

Source: Charleston County School District, 2016

The district wanted to align the extended learning academic component with the school's learning objectives. In order to do this, principals reviewed the potential partners and their offering to better align with the curriculum of the school.

The program model is based on the research and assessment tool created by the David P. Weikart Center for Youth Program Quality. The Center supports youth program quality improvement efforts in over 105 networks across the United States, in Canada, and Mexico. The Center has created a youth program quality improvement process. The process itself, called the Youth Program Quality Assessment, is based on positive youth development research which provides the framework for developing safe, supportive and productive environments for youth.

Presentation of Findings

Student Achievement

Student achievement was assessed using Measure of Academic Measures (MAP). MAP scores were compared for gains from fall, 2015 to spring, 2016 for participants in the program who attended the extended learning program 90 percent of the time as compared to students who did not participate in the extended learning program. The results are shown in table 21.

Table 21. Average MAP Gains 2015-16
for Program Participants vs. Non-participates

Subject and Grade Level	Chicora		Sanders-Clyde	
	Participants Average Gain	Non-participants Average Gain	Participants Average Gain	Non-participants Average Gain

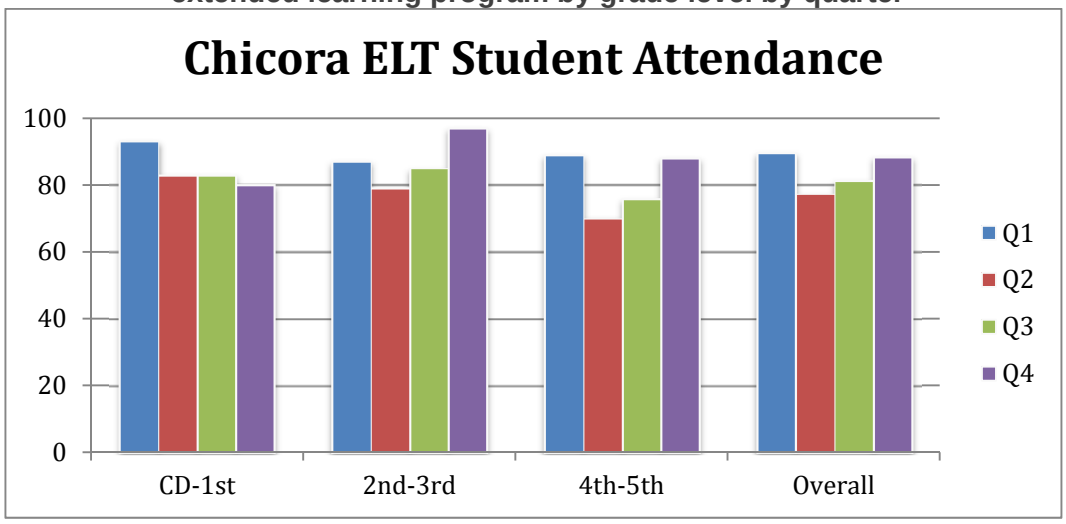
Reading				
Kindergarten	-	-	-	-
Grade 1	18.1	18.0	17.8	18.6
Grade 2	17.9	11.3	11.1	10.4
Grade 3	8.6	7.9	5.8	7.4
Grade 4	6.5	8.0	4.1	-1.4
Grade 5	I/S	7.3	6.5	5.4
Grade 6			2.0	1.1
Mathematics				
Kindergarten	9.5	11.4	13.2	11.2
Grade 1	22.5	18.9	11.4	18.2
Grade 2	13.2	11.3	12.1	11.9
Grade 3	12.3	9.5	8.8	9.6
Grade 4	7.5	9.6	7.3	3.8
Grade 5	I/S	6.8	10.0	5.0
Grade 6	-	-	4.1	5.3

Source: Charleston County School District, 2016
Notes: Green indicates that the program participates outperformed non-program participants whereas red shading indicates they did not. I/S represents less than 10 students were assessed and not reported.

Student Attendance and Retention

The following data in Figures 4 and 5 below represents the attendance and retention rates for all students who enrolled in the extended learning program by grade level for Chicora expanded learning time (ELT) and Sanders-Clyde expanded learning time (ELT) students for the grant period.

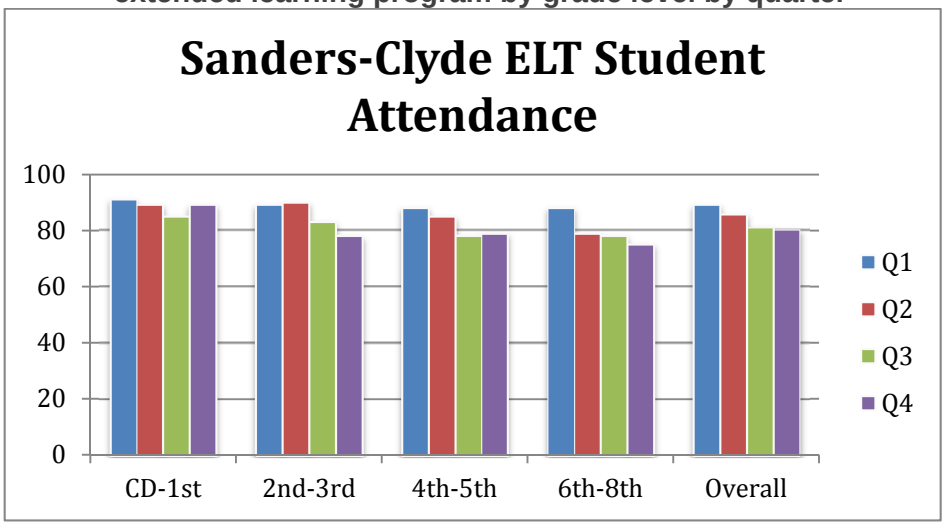
Figure 4. Attendance of students enrolled in Sanders-Clyde extended learning program by grade level by quarter



Source: Charleston County School District, 2016

Child development (CD) and grade one students were at the 90 percent attendance rate one out of four quarters. Second and third graders met a 90 percent attendance for two quarters. Overall, students did not meet a 90 percent attendance rate for any of the four quarters.

Figure 5. Attendance of students enrolled in Sanders-Clyde extended learning program by grade level by quarter



Source: *Charleston County School District, 2016*

Child development (CD) and grade one students did not meet a 90 percent percent attendance for any of the four quarters. Second and third graders for also did not meet a 90% attendance and fourth and fifth graders did not meet ta 90 percent for any of the four quarters. For sixth through eighth graders, the attendance did not meet 90 percent for any quarter. With all grade levels combined, the data shows that students did not meet attendance a 90 percent attendance for any quarter of the school year.

School Attendance

The in-school attendance data was for only students who attended the attended learning extended program for at least 90 percent of the time. The attendance for in school showed Chicora students had absences of a mean of 14.1 days whereas the nonparticipants in the program showed a mean absence of 59.8 days.

The attendance for in school showed Sanders-Clyde students had absences of a mean of 18.3 days and nonparticipants in the program with a mean of 34.3 days.

Out of School Suspensions

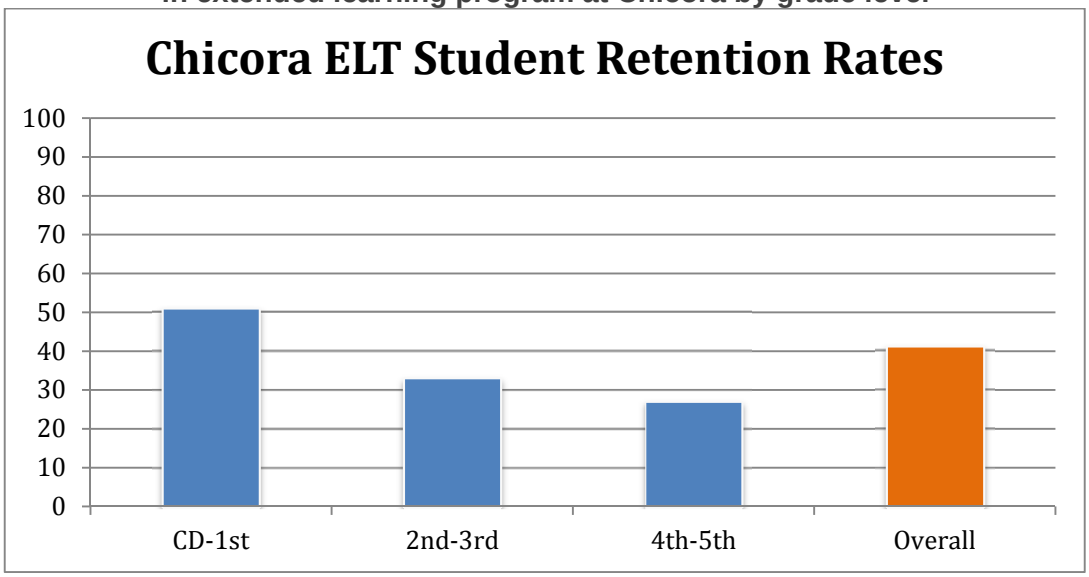
The out of school suspension data was for only students who attended the attended learning extended program for at least 90 percent of the time. Students at Chicora had fewer out of school suspensions with a mean of 3 compared to nonparticipating students mean of 10.8.

Students at Sander-Clyde had fewer out of school suspensions with a mean of 3.3 compared to nonparticipating students mean of 8.3.

Retention in Program

Retention rates reflect the percentage of students who actively participated in the extended learning model at Chicora and Sanders Clyde throughout the school year. Figures 6 and 7 show the retention rates for 2015-16.

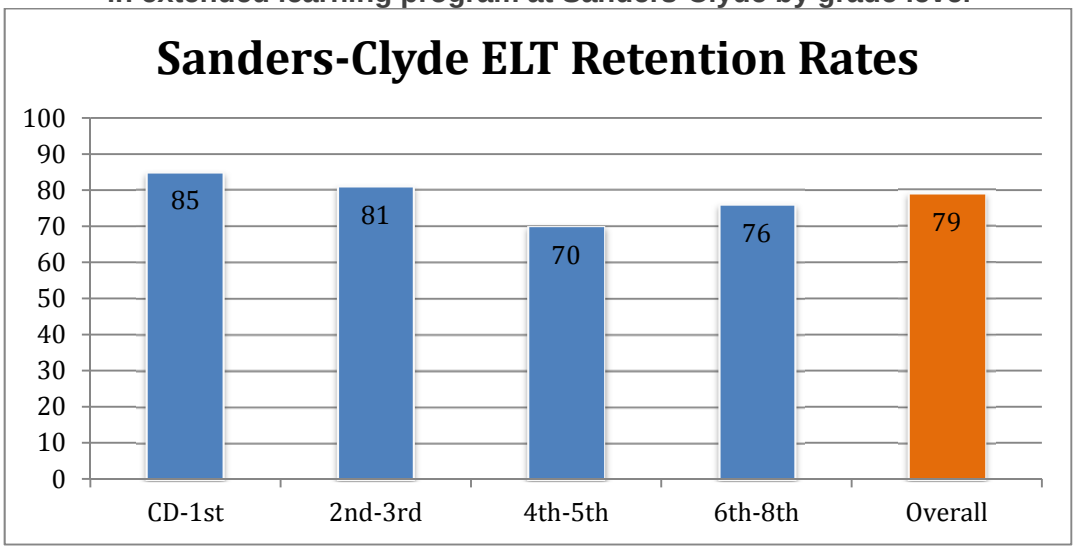
Figure 6. Percentage of students who actively participated in extended learning program at Chicora by grade level



Source: *Charleston County School District*

The data above indicate that slightly over 50 percent of students in child development and grade 1 classes were retained in the program. For second and third grade approximately 32 percent of students were retained in the extended learning program and in grades 4 and 5, approximately 28 percent of students were retained in the extended learning program. Overall, approximately forty percent of students enrolled in the expanded learning program at Chicora Elementary were retained in the program for the 2015-16 school year.

Figure 7. Percentage of students who actively participated in extended learning program at Sanders-Clyde by grade level



Source: Charleston County School District, 2016

The data above indicate that over 85 percent of students in child development and grade 1 classes were retained in the program. For second grade and third grade approximately 81 percent of students were retained in the extended learning program and in grades 4 and 5,

approximately 70 percent of students were retained in the extended learning program. Finally in middle school, 76 percent of the students were retained in the program. Overall, 79 percent of students enrolled in the expanded learning program at Sanders-Clyde Elementary were retained in the program for the 2015-16 school year.

Student Perceptions

Students were administered an end of the year survey. A professor at The Citadel specifically developed the survey for the extended learning program. The survey asked students to respond to questions representing how they feel at school, what they learned, interactions with others, how they feel about themselves/family and how they feel they address problem. The responses are located in Tables 22, 23, and 24 below.

Table 22
Results of student surveys for Chicora and Sanders-Clyde

End of the Year Student Survey		
	Chicora (n=13)	**Sanders Clyde (n=42)**
	Percent Yes	**Percent Yes**
I feel safe.	92%	79%
I made friends.	69%	73%
I got to be a good leader.	77%	38%
I got to make good choices.	77%	79%
I learned new art, music, drama, or dance skills.	69%	40%
I learned sports, fitness or health skills.	77%	60%
I got better at reading and writing.	62%	51%
I learned about college.	54%	26%
The other kids in the program were nice.	54%	37%
The adults helped and supported me.	77%	59%
I thought of new jobs and careers I might want to do.	62%	53%
I had fun.	92%	74%
I felt welcomed and included.	54%	62%
I want to be part of after-school program next year.	62%	33%

Source: Charleston County School District, 2016

Table 23
Continuation of Student Survey - Chicora

End of the Year Student Survey			
Chicora N=13 in Grades 3,4,5			
	Almost Never/Not Very Often	**Sometimes**	**A lot of the time/almost all of the time**
I feel good.	17%	33%	50%
I try my hardest whenever I set out to do something.	33%	33%	33%
I have good friends.	50%	33%	16%
What I do makes a difference.	33%	59%	17%
I am a good worker.	25%	8%	67%
I feel strong and fit.	25%	25%	50%
I feel happy.	42%	8%	50%
I care enough to do my very best.	33%	25%	42%
My family cares about me.	33%	0%	67%
What I do is meaningful.	59%	8%	33%
When I set a goal, I achieve it.	33%	33%	33%
I like the way I look.	33%	8%	59%
I feel full of joy.	33%	17%	50%
My participation matters.	25%	8%	67%
I feel close to my buddies, teammates or classmates.	33%	42%	25%
What I do is important.	41%	17%	42%
I am proud of what I have accomplished.	33%	17%	50%
I feel healthy/energetic.	33%	17%	50%

Source: Charleston County School District, 2016

Table 24
Continuation of Student Survey Sanders–Clyde

End of the Year Student Survey			
Sanders Clyde N=42 2,3,4,5			
	Almost Never/Not Very Often	**Sometimes**	**A lot of the time/almost all of the time**
I feel good.	28%	35%	38%
I try my hardest whenever I set out to do something.	26%	28%	48%
I have good friends.	37%	17%	46%
What I do makes a difference.	24%	41%	34%
I am a good worker.	20%	24%	56%
I feel strong and fit.	23%	18%	60%
I feel happy.	27%	20%	53%
I care enough to do my very best.	15%	15%	70%
My family cares about me.	12%	7%	81%
What I do is meaningful.	34%	23%	43%
When I set a goal, I achieve it.	22%	29%	49%
I like the way I look.	8%	18%	76%
I feel full of joy.	23%	31%	46%
My participation matters.	26%	15%	61%
I feel close to my buddies, teammates or classmates.	27%	22%	51%
What I do is important.	23%	22%	51%
I am proud of what I have accomplished.	17%	18%	61%
I feel healthy/energetic.	17%	22%	61%

Source: Charleston County School District, 2016

A summary of the above survey results finds that overall a higher percentage of Chicora students showed a favorable opinion towards the program, learning new things and wanting to be a part of the program the next year. However, overall the percentage of students who indicated they want to be part of the program for a second year was 42%.

Overall, student responses showed a low percentage on how they feel about trying hard, making a difference, being a good worker and setting goals. Chicora students showed a more favorable rating on these attributes than Sanders-Clyde. Students at Chicora responded that only 33% felt proud of themselves and Sanders-Clyde students at 17%.

Parent Events and Perceptions

As part of the grant, the district wanted to increase parent participation and involvement in their child's education. Parents were invited to several events called Show Me What You Know, which were evening programs designed to support parents in helping their children with being successful in school. A survey was administered to parents. Parents' responses ranged from 77 percent to 100 percent as being satisfied with the program and their child's learning. The results are shown in Tables 25 and 26 below.

Table 25
Parent Survey Results from Chicora

	Number of Parent Responses N=13		
Survey Question	**Scale**		
	Agree	**Neutral**	**Disagree**
1. Were you able to see progress in your child's learning this evening?	12	1	
2. Has this event given you a better understanding of the Expanded Learning Program?	13		
3. Are you satisfied with the quality of the Expanded Learning Program?	12	1	
4. Did you learn anything new about the Expanded Learning Program?	10	3	
5. Did your child enjoy the Expanded Learning Program?	12		

Source: Charleston County School District, 2016

Additional Comments:

- Thanks
- I am grateful to have an option for my child to go to after hours.
- Very nice people in this program. Keep up the great work.
- Great program!
- Awesome staff and leader, Mr. Sanders. Registration staff is awesome, friendly and very helpful.
- It would add more to the program if there were more interacting with parents similar to this evening. Enjoyable.
- I love this place.

Table 26
Parent Survey with Sanders Clyde Results

Survey Question	Number of Parent Responses N=16		
	Scale		
	Agree	Neutral	Disagree
1. Were you able to see progress in your child's learning this evening?	16		
2. Has this event given you a better understanding of the Expanded Learning Program?	16		
3. Are you satisfied with the quality of the Expanded Learning Program?	16		
4. Did you learn anything new about the Expanded Learning Program?	16		
5. Did your child enjoy the Expanded Learning Program?	16		

Source: Charleston County School District, 2016

Additional Comments:

- Have grandmother lunch day.
- Miss Daniels is a great director and the tutors are all awesome.
- Continue with the great accomplishments and teaching and exposing children to different opportunities. Great job!
- He has grown a lot coming to this program. Plus, he likes coming every day.
- They love it!

Parent Events

Parent attendance at the Show Me What You Know events are summarized below in table 27.

Table 27
Parent Attendance at Evening Events

SCHOOLS	Winter 2015	Spring 2016
Chicora School of Communications	13	5
Sanders-Clyde Creative Arts School	16	16

Challenges

1. Getting the involvement from the parents/families in afterschool events continues to be a struggle for these two schools. While the number are low, Chicora did not have a history of parent involvement and this was a first step in engaging parents in the education of their children. Sanders-Clyde showed greater parent participation however this was low as well.

2. The turnover and quality of the staff in the expanded learning program was a challenge. Counselor staff was paid at a district rate of $9.25 per hour, which hampered the ability to hire individuals with longer staying power.

3. It was reported that there was an inordinate amount time spent on policies and logistics at the beginning of the program. However, some of these issues may have come about due to the restructuring of the grant management team at the beginning.

4. Charleston Promise Neighborhood implemented a quality improvement system, Weikart Centers Youth Program Quality Assessment (YPQA), for the implementation of this grant. The instrument helps organizations focus on improving youth programs by guiding the staff through an ongoing process of assessing, planning and improving. This new program model and structure required substantial change on the part of the existing staff. The implementation of the quality assessment created some tension among the staff because buy-in had not been established. It was reported some of the partners and staff who had previously been working with Charleston County were resistant to the requirements of the grant such as maintaining a daily schedules, implementing a research-based curriculum, working within a budget, attending regular staff meetings, and participating in start-up and on-going training. However, the training of reflecting on how to accomplish goals more effectively was deemed an important component of the grant. The grant partners indicate quality assessment will be a part of future grants and a greater buy-in to this concept would be part of the process.

5. No conclusion could be drawn on student achievement results because the data was not provided for Chicora and Sander-Clyde Elementary Schools was not provided.

6. Based on the student surveys, responses indicated students do not feel their actions or efforts make a difference in their outcomes with approximately one third of Chicora students indicating what they do make a difference and only one fourth of Sander Clyde students.

7. After a self-assessment of the program operations for 2015-16, the school district and CPN want to focus more time on the academic block and work more closely with principals to align the content addressed in the extended learning program with the lessons during the school day.

8. If resources are available, the district and CPN recommend a smaller teacher/student ratio from 12:1 to 6:1.

Successes

1. For the parents/families who attended the parent events, the perceptions of the program, and their students' learning was overwhelmingly positive which may have led to a greater parent involvement in student attendance in school.

2. The district and CPN stated that the enrichment partners who provided the extended learning activities were of high quality. The services provided and the professionalism of the vendors made this component of the extended learning day run smoothly. The RFP process provided a mechanism by which the CCSD and CPN were able to consistently apply the requirements for implementation.

3. The collaboration between the CPN and the CCSD has created a "community conversation" around high quality afterschool programming. The district and Charleston Promise Neighborhood have had deep discussions about impactful, data driven conversations about expanded learning for children. These conversations have created interest within the Charleston community with the institutions of higher education and a national foundation.

4. Through the vigorous fund raising efforts by the Charleston Promise Neighborhood, the extended learning program will continue in Charleston County for Chicora and Sander-Clyde Elementary Schools for the 2016-17 school year.

5. The CPN and the district are to be commended for implementing a process to look at program quality for the extended learning model. The CPN and the district plan to continue to build a culture focused on data and process improvement and learning staff will continue to use the Weikert system.

6. The in-school absences were significantly lower for students in the extended learning program at both Chicora and Sanders-Clyde than for students who were non-participants in the program. Having students attend school on a regular basis appeared to contribute to the gains in the MAP scores.

From the analysis of MAP data, program participants were slightly more likely to be higher achieving students and these students were also more likely to have high attendance rates, thus these results should be interpreted with caution. Perhaps more importantly we know that the students who choose to participate are willing to attend school an extra 2.5 hours per day. The motivation on the part of the student and parent for students to attend the extra 2.5 hours to engage in school activities may be the reason for better school-day attendance.

7. The MAP gains for the students in the program that attended at least 90 percent of the time indicates program participants showed more growth on MAP from fall to spring than non-participants in most grades. At Chicora for the nine subgroups assesses on MAP, six showed higher gains for the participants in the program. At Sanders-Clyde, for the 13 subgroups assessed, eight showed higher gains for the participants. Gains were similar for both math and reading.
As compared to national groups with similar fall MAP scores, Chicora students in grades 1 and 4 showed greater gains in reading and students in grade 1 showed greater gains in

mathematics. For Sanders-Clyde students, as compared to national groups with similar fall MAP scores, students showed greater gains in grade 1 and 5 reading and grade 5 math. This analysis yielded mixed results.

Jasper County School District

Introduction to the Project

The Jasper County School District implemented a STEM (science, math, technology, engineering) program for middle school students in a summer program and after school program at Hardeeville-Ridgeland Middle School entitled STEM@HRM. Both programs used hands–on learning, project-based lessons and exploration through collaborative efforts with real world problems.

Hardeeville-Ridgeland Middle School had an 87.95 poverty index. On the last several test administrations of the Palmetto Assessment of State Standards (PASS), approximately two thirds of the students have consistently scored Not Met on mathematics and approximately three fourths of the students have consistently scored NOT MET on science PASS.

The project was initially created for 150 students; however, due to challenges reported by the district the number of students who participated was 94. The challenges reported were: (1) changes to the middle school schedule; (2) a change in district leadership, and (3) the projected enrollment for the school was lower than expected.

Background

The STEM@HRM utilized the 5E Instructional Model as the basis for the lessons. This learning model is built with an inquiry-base approach to learning and is described in table 28 below. The 5E instructional model has been shown to increase mastery of science content, scientific reasoning, and interest in science. (Bybee, Rodger, Taylor, Gardner, Scotter, Powell and Westbrook, 2006). In addition, the district used curriculum from NASA-Exploration Design challenge and STEM kits from Stemfinity. (See Appendix K for the design challenge rubric.) Certified teachers along with teacher assistants delivered the instruction two hours a day for two days per week for 24 weeks for the afterschool component and half days for 16 days in the summer of 2015. College students and high schools served as assistants and mentors for the middle school students.

Table 28
Summary of the 5E Instructional Model

Phase	Summary
Engagement	The teacher or a curriculum task accesses the learners' prior knowledge and helps them become engaged in a new concept through the use of short activities that promote curiosity and elicit prior knowledge. The activity should make connections between past and present learning experiences, expose prior conceptions, and organize students' thinking toward the learning outcomes of current activities.
Exploration	Exploration experiences provide students with a common base of activities within which current concepts (i.e., misconceptions), processes, and skills are identified and conceptual change is facilitated. Learners may complete lab activities that help them use prior knowledge to generate new ideas, explore questions and

	possibilities, and design and conduct a preliminary investigation.
Explanation	The explanation phase focuses students' attention on a particular aspect of their engagement and exploration experiences and provides opportunities to demonstrate their conceptual understanding, process skills, or behaviors. This phase also provides opportunities for teachers to directly introduce a concept, process, or skill. Learners explain their understanding of the concept. An explanation from the teacher or the curriculum may guide them toward a deeper understanding, which is a critical part of this phase.
Elaboration	Teachers challenge and extend students' conceptual understanding and skills. Through new experiences, the students develop deeper and broader understanding, more information, and adequate skills. Students apply their understanding of the concept by conducting additional activities.
Evaluation	The evaluation phase encourages students to assess their understanding and abilities and provides opportunities for teachers to evaluate student progress toward achieving the educational objectives.

Source: Science Education Curriculum Study, 1987.

The goals for the grant were:

1. to increase math scores by 10% for students in the program,
2. to increase science scores by 10% for students in the program,
3. to monitor the STEM implementation based on the 5E Instructional model; and
4. to increase student interest in math and science.

Partnering with the school district were the Ruth Patrick Science Center in Aiken, the University of South Carolina at Beaufort, the Technical School of the Low country and the Coastal Discovery Museum Natural History. In addition, Jasper partnered with the Boys and Girls' Club, Antioch Educational Center, and Academy for Career Excellence (ACE). These partners provided teacher training, and lesson planning training and served as consultants on an as-needed basis.

Jasper utilized an advisory group to plan and implement the grant. The advisory group was already in existence and also served as the guiding force for their district strategic plan in 2015. The team was composed of the superintendent, business leaders, parents, private school representatives, principals, teachers, PTO and School Improvement Councils.

The demographics of the students enrolled in the summer program are summarized in Table 29 below. A total of 40 students participated.

Table 29
Demographic Data of Summer School Participants

Gender	Number/Percent of Students	Race	Number/Percent of Students
Male	22/55%	**African American**	32/80%
Female	18/45%	**Bi-Racial**	2/5%
		Hispanic	3/7.5%
		White	3/7.5%

Total	40		40

Source: Jasper County School District, 2016

The demographics of the students enrolled in the after-school program are summarized in Table 30 below. A total of 54 students participated.

Table 30
Demographic Data of After-School Participants

Gender	Number/Percent of Students	Race	Number/Percent of Students
Male	28/52%	**African American**	35/64.8%
Female	26/48%	**Bi-Racial**	5/9.3%
		Hispanic	8/14.8%
		Asian	2/3.7%
		White	4/37.4%

Total	54		54

Source: Jasper County School District, 2016

Presentation of Findings

Several methods to assess the results of the grant project were used: student surveys, project completion rates, teacher surveys, the Palmetto Assessment of State Standards (PASS) science results, and STAR Math pre and posttest.

Student Survey

Student surveys were distributed as a pre- and posttest. The results are shown in the Table 31 below.

Table 31
Pre- and post- survey student results on student perceptions about program

	Percentage Agree or Strongly Agree Pretest	Percentage Agree or Strongly Agree Post-test	Percentage Disagree or Strongly Disagree Pretest	Percentage Disagree or Strongly Disagree Post-test
I feel that I have a clear understanding of the STEM@HRM program goals and objectives	100%	90.5%	0%	9.5%
I feel I	100%	95.5%	0%	4.5%

understand the rules of the program.				
I feel that STEM provides excellent opportunities for hands-on learning.	95.5%	86.4%	4.5%	13.6%
I feel/felt safe when I am at the program.	90.5%	86.4%	9.5%	13.6%
I feel/felt the teacher assigned to me makes the program lessons and activities relevant and important to me.	86.4%	86.4%	13.6%	13.6%
I am/was excited about the instruction and activities in the program.	86.4%	86.4%	13.6%	13.6%
I feel/felt the program will prepare/d me for next school year.	72.8%	72.8%	27.2%	27.2%
I like/d the days and hours of the program.	68.2%	81.8%	31.8%	18.2%
I look/ed forward to the time I will spend/spent in the program.	77.3%	86.4%	22.7%	13.6%
I would recommend the program to other students.	86.4%	90.5%	13.6%	9.5%

Source: Jasper County School District, 2016

Student Projects

Up to twelve projects were implemented in the after school portion of the project. Table 32 below shows the number and percentage of the projects completed.

Table 32
Student Project Completion Rates

Classroom	Number of Projects Completed at Mastery Level	Percentage of Projects Completed at Mastery Level
A	4 of 9	44%
B	7 of 11	64%
C	5 of 10	50%
D	7 of 12	58%

Source: Jasper County School District, 2016

Teacher Questionnaire

Teachers were asked the strengths and challenges of the project. A summary of their responses is shown in table 34 below.

Table 33
Teacher Responses to questionnaire regarding implementation of program

Strengths	Challenges
• Availability of supplies and technology • Transportation for students • Partnerships • Students participation and involvement	• Student enrollment • Student attendance

Source: Jasper County School District, 2016

Student Academic Performance

The Palmetto Assessment of State Standards (PASS) in science was administered to all students in the project in May, 2016. The results are summarized below in table 34.

Table 34
PASS Results in Science 2016 for students in the program by grade level, n=50

	Number of Students	Percentage of Students
Grade 6		
Met	2	15.4%

Not Met	11	84.6%
Grade 7		
Met	6	28.6%
Not Met	15	71.4%
Grade 8		
Met	4	25%
Not Net	12	75%

Source: Jasper County School District, 2016

Of the 50 students who participated in the program, 24 percent scored Met on the PASS Science test.

The Star assessment system was administered to students in the after school and summer program as a pre-test and post-test. The Star assessment is a commercially available testing system for math, early literacy and reading. It can be given multiple times throughout the school year and provides estimates of students' skills and comparisons of students' abilities to national norms. STAR is intended to aid with developing curriculum and instruction by providing feedback about student, classroom, and grade level progress. Results of STAR testing in mathematics for grades 6, 7 and 8 are presented in the tables 35, 36 and 37 below.

Table 35
Grade 6 STAR Math Results

Grade 6	Afterschool Program	Summer Program
	N= 29	N=14
Pretest	599	616
Posttest	649	611
Change	+50	-5
Median Percentile	43%	19%

Source: Jasper County School District, 2016

The results for grade 6 show afterschool students grew 50 points on STAR math to 649, which placed the students at the 43rd percentile. This is equivalent to approximately the end of 6th grade. For the students in the summer program the posttest results show a 5-point decrease, which places students at approximately at a grade, equivalent of 5.5.

Table 36
Grade 7 STAR Math Results

Grade 7	Afterschool Program	Summer Program
	N=13	N=7
Pretest	655	607
Posttest	693	629
Change	+38	+22
Median Percentile	31%	30%

Source: Jasper County School District, 2016

The results of STAR testing for the 7th grade afterschool students showed a 38 point increase which is a grade equivalent of 6.2. The students in the summer program showed a 22-point gain and this is equivalent to a grade equivalent of 5.7

Table 37
Grade 8 STAR Math Results

Grade 8	Afterschool Program	Summer Program
	N=13	N=7
Pretest	647	541
Posttest	661	647
Change	+14	+106
Median Percentile	26%	41%

Source: Jasper County School District, 2016

The results of STAR testing for the 8th grade afterschool students showed a 14 point increase which is a grade equivalent of grade 8. The students in the summer program showed a 106-point gain and this is equivalent to a grade equivalent of 5.9.

Challenges

1. In planning for professional learning for teachers, the district had planned to partner with USC-Beaufort to use undergraduate students to assist teachers with implementing the lessons. This partnership was not initiated as the schedules of the college students prohibited them from assisting during the after school hours.

2. Scores for middle grade students in science did not show improvement. Student scores showed only 15.9 percent meeting state science standards on PASS with 84.1% of the students scoring Not Met. Additionally, no student in the program met the science standards at the exemplary level. Scores from the previous year were not available.

3. According to STAR math at the end of the sixth grade, after-school students made gains on the assessment. However, according to their mean scaled scores, the students' grade equivalence was one year behind. Seventh grade students showed a gain of 38 and 22 points for the afterschool but their mean scaled scores placed them at a grade equivalent level of grade 5, 5 months. For eighth grade, there were similar results with students making gains of 14 and 106 points on the scaled scores. Grade level equivalence were grade 6, 2 months for the after school students and grade 5, 9 months for the summer program students.

4. As a measure of student participation in projects, the district reported on the number of activities completed at the mastery level by students. Based on the four classroom of students in the after school program, the percentage of completion was 44%, 64%, 50% and 58%. Given that students had the opportunities to correct, redo and/or make changes to the tasks along with teacher assistance, these completion rates appear to be low.

5. While attendance rates were not supplied, teacher and staff voiced concerns regarding students attending on a regular basis.

6. The student achievement goal of increasing math and science scores could not be determined because the scores from the previous year were not submitted.

7. Future plans for the implementation of the STEM model should provide greater structure and continuity for lesson development.

Successes

1. Student achievement results from STAR showed the most promising results in math. Grade 6 students in the after school program showed a 50 point gain with students scoring at the 43rd percentile.

2. For grade 8, the students in the summer program showed higher gains with a total of 106 points, which placed them at the 41st percentile.

3. Student perceptions on the student survey were largely unchanged pre- to posttest, however, a higher percentage of students responded they looked forward to the time spent in the program and they would recommend the program to other students.

4. The curricular materials utilized in the grant were high quality and research based.

5. Jasper is planning to continue the STEM academy at the end of the school day using district funds.

IV. Grant Highlights and Recommendations/Conclusions

Highlights of the grant projects are summarized in table 38 below.

Table 38
Highlights of 2015-16 Community Block Grants

District	Highlights
Beaufort	➢ Students in the program showed gains in math and reading and greater gains than students not in the program. ➢ The relationship and communication among the families/students in the housing apartment community, the NOC and the school has greatly increased. ➢ The NOC has broadened its influence in the community and continues to make strides with the lowest performing students in the high poverty area in the city of Beaufort.
Clarendon	➢ The partnerships created in the district were numerous and should be sustained for future work in the district. ➢ Sixth and seventh grade science scores show the most promise for student achievement and interest ➢ Based on the Gallup Poll Student Survey, Clarendon 1 students show slightly more positive perceptions on engagement, hope, entrepreneurial aspiration and career/financial literacy.
Colleton	➢ The First League Lego (FLL) robotics curriculum was implemented with fidelity. ➢ Student scores in math as measured by MAP showed 93% of students saw gains. ➢ In its first year of operation, the district was able to host a regional FLL event and three teams progressed to the state finals.
Charleston	➢ A quality assessment program was implemented to assist the partners in implementing a high quality program for after school programs and will be used in future grant implementations. ➢ The partnership initiated in Charleston has created a greater awareness of the need and increased the communication among partners for extended learning programs. ➢ Academic results were mixed however increased focus on alignment between in-school and extended learning should show more promising results.
Jasper	➢ The instructional model and curriculum used in the project were of high quality and research based. ➢ Mixed results were shown on the student however over 90 percent indicated they would recommend the program. ➢ Academic results were mixed but scores in 6th and 8th grade math showed a potential for student growth in math.

Conclusions/Recommendations

Overall, the recommendations for future community block grant initiatives are summarized below.

✓ 1. School districts served as the fiscal agents for the grant funds allocated from the Education Oversight Committee for the purpose of implementing the grants as described in the grant proposal. School district superintendents and financial officers signed an Assurance of Award form to comply with state financial regulations. One hundred percent of the funds were dispersed to districts at the beginning of the grant period. In order to ensure data requested of districts is complete and submitted on a timely basis, future grant opportunities should require school districts to submit final expenditure requests at the conclusion of the grant period for some portion of the remaining funds or allocate funds to districts on an incremental basis throughout the grant period.

✓ 2. A recommendation for further discussion is to consider a 2 to 3 year grant program to ensure that school districts/community partnerships have built a strong foundation to sustain the grant program. In addition, data from a single year most likely will not provide the long-term gains regarding goals outlined in the grant. However, with multi-year implementation of the programs described for this grant, broader implications with greater defined results could be obtained.

✓ 3. In future grant opportunities, the evaluation component of the grant should be reviewed and appropriate changes made by the district as to the measurable goals and corresponding data needed to measure the goals before a grant is awarded.

✓ 4. The proviso in place that initiated this grant opportunity for schools and community partners had as its primary purpose to encourage and sustain partnerships between a community and its local public school district or school for the implementation of innovative, state-of-the-art education initiatives and models to improve student learning. While the goal is laudable, it may be too broad and general to provide specific recommendations and conclusions for a set of grants. Considerations for future grant opportunities to promote innovation and community partnerships may need to take a more focused approach offering districts flexibility but with specific, strategic and targeted initiative.

✓ 5. A pattern seen in the five projects was a need for a closer alignment of the content/skills in the extended learning school to the in-school lessons. The content and skills outlined in the academic standards for a grade level could be better articulated in the extended learning programs. This would provide opportunities for greater practice and/or remediation in a specific skill for a content area as well as a practical application of the skill/content.

Appendix A.
Proviso 1.94

South Carolina Community Block Grants for Education Pilot Program
Authorizing Legislation

Proviso 1.94. of the 2014-15 General Appropriation Act creates the South Carolina Community Block Grants for Education Pilot Program:

1.94. (SDE: South Carolina Community Block Grants for Education Pilot Program) There is created the South Carolina Community Block Grants for Education Pilot Program. The purpose of this matching grants program is to encourage and sustain partnerships between a community and its local public school district or school for the implementation of innovative, state-of-the-art education initiatives and models to improve student learning. The initiatives and models funded by the grant must be well designed, based on strong evidence of effectiveness, and have a history of improved student performance.

The General Assembly finds that the success offered by these initiatives and programs is assured best when vigorous community support is integral to their development and implementation. It is the intent of this proviso to encourage public school and district communities and their entrepreneurial public educators *to undertake state-of-the-art initiatives to improve student learning and to share the results of these efforts with the state's public education community.

As used in this proviso:

(1) "Community" is defined as a group of parents, educators, and individuals from business, faith groups, elected officials, non-profit organizations and others who support the public school district or school in its efforts to provide an outstanding education for each child. As applied to the schools impacted within a district or an individual school, "community" includes the school faculty and the School Improvement Council as established in Section 59-20-60 of the 1976 Code;

(2) "Poverty" is defined as the percent of students eligible in the prior year for the free and reduced price lunch program and or Medicaid; and

(3) "Achievement" is as established by the Education Oversight Committee for the report card ratings developed pursuant to Section 59-18-900 of the 1976 Code.

The executive director of the Education Oversight Committee is directed to appoint an independent grants committee to develop the process for awarding the grants including the application procedure, selection process, and matching grant formula. The grants committee will be comprised of seven members, three members selected from the education community and four members from the business community. The chairman of the committee will be selected by the committee members at the first meeting of the grants committee. The grants committee will review and select the recipients of the Community Block Grants for Education.

The criteria for awarding the grants must include, but are not limited to:

(1) the establishment and continuation of a robust community advisory committee to leverage funding, expertise, and other resources to assist the district or school throughout the implementation of the initiatives funded through the Block Grant Program;

(2) a demonstrated ability to meet the match throughout the granting period;

(3) a demonstrated ability to implement the initiative or model as set forth in the application; and

(4) an explanation of the manner in which the initiative supports the district's or school's strategic plan required by Section 59-18-1310 of the 1976 Code.

In addition, the district or school, with input from the community advisory committee, must include:

(1) a comprehensive plan to examine delivery implementation and measure impact of the model;

(2) a report on implementation problems and successes and impact of the innovation or model; and

(3) evidence of support for the project from the school district administration when an individual school applies for a grant.

The match required from a grant recipient is based on the poverty of the district or school. No matching amount will exceed more than seventy percent of the grant request or be less than ten percent of the request. The required match may be met by funds or by in-kind donations, such as technology, to be further defined by the grants committee. Public school districts and schools that have high poverty and low achievement will receive priority for grants when their applications are judged to meet the criteria established for the grant program.

However, no grant may exceed $250,000 annually unless the grants committee finds that exceptional circumstances warrant exceeding this amount.

The Education Oversight Committee will review the grantee reports and examine the implementation of the initiatives and models to understand the delivery of services and any contextual factors. The Oversight Committee will then highlight the accomplishments and common challenges of the initiatives and models funded by the Community Block Grant for Education Pilot Program to share the lessons learned with the state's public education community.

Appendix B.
Grant Application

Application for South Carolina Community Block Grants for Education Pilot Program

Purpose: To encourage and sustain partnerships between a community and its local public school district or school for the implementation of innovative, state-of-the-art education initiatives and models to improve student learning.

Grants Committee: Appointed by executive director of the Education Oversight Committee, the Committee will develop the process for awarding the grants including the application procedure, selection process, and matching grant formula. The grants committee will be comprised of seven members, three members selected from the education community and four members from the business community.

Eligible Applicants: A public school, including charter schools, schools or a district in South Carolina

Criteria: Applications will be awarded based on the following criteria. Schools and districts with a high poverty and low achievement as measured by state accountability system will be given priority of funding.

> (1) the establishment and continuation of a robust community advisory committee to leverage funding, expertise, and other resources to assist the district or school throughout the implementation of the initiatives funded through the Block Grant Program;
> (2) a demonstrated ability to meet the match throughout the granting period;
> (3) a demonstrated ability to implement the initiative or model as set forth in the application;
> (4) an explanation of the manner in which the initiative supports the district's or school's strategic plan required by Section 59-18-1310 of the 1976 Code;
> (5) a comprehensive plan to examine the implementation and measure the impact of the model; and
> (6) a report on implementation problems and successes and impact of the innovation or model.

Match Requirement: The school or district must match the grant between 10 and 70% to be based on the poverty index of the school. The required match may be met by funds or by in-kind donations, such as technology.

Grant Award- May not exceed $250,000 unless the grants committee finds exceptional circumstances warrant greater amount

Deadline: Applications must be received on or before _____

Applications Process

A school, schools, or school district applying for the block grant must complete an application that consists of the following components:

A. General Information

School(s) /District Applying for Grant: _____

Address and Phone Number: _____

_____

_____

Contact Name: _____

Title _____

Phone Number _____

Email _____

Fiscal Agent for Grant:

Contact Name _____

Title: _____

Phone Number: _____

Email: _____

Location(s) of Innovation, if different from School(s) Applying for Grant:

Location(s): _____

Address: _____

_____

Contact Name: _____

Title _____

Phone Number: _____

Email: _____

Brief description of initiative(s) or model(s) to be implemented

_____

_____

_____

_____

Number of Students to be Served: _____

2013-14 Poverty Index for Location(s): _____

Total Amount of Grant Funding Requested: _____

Total Amount of Match Required for 2014-15: _____

B. Proposal Summary

Applicants must submit a one-page narrative that is limited to 2,000 characters and must include the following items:

- Name of school/district applying for funds;

- Total amount of funds requested;
- Total amount of matching funds, including in-kind;
- Description of the initiative or model to be implemented;
- Summary of objectives to be achieved;
- Target number of students to be served; and
- Description of community advisory committee.

C. Project Details (Maximum of 15 pages and 100 points)

The Project Details should include detailed responses to the following questions or issues. These responses will be evaluated and scored to determine grant award recipients. .The Project Narrative must be a Word or PDF document with 1" margins at the top, bottom and sides with pages numbered. The Projective Narrative should not exceed 15 pages.

A. Needs Assessment (10 points)
Describe the need or problem the initiative is to address. Provide the data examined and explain how it was used in assessing student needs. Describe the involvement of the community advisory group, the school/district strategic plan, faculty input, other information gathered.

B. Goals and Objectives (15 points)
Provide a clear statement of the goal(s) of the initiative. Describe the objectives and delineate the specific expected outcomes. Where appropriate, include changes in knowledge, attitudes, and behavior of students, faculty, community, etc.

C. Initiative Design (25 points)
Describe the grant initiative or model. Outline the strategies and activities to be undertaken. Provide a review of the research on which the initiative is based. Explain how this undertaking is "state of the art."

D. Community Advisory Group (20 points)
Provide a description of the involvement of the community group in the school/district's strategic planning and activities. Include the length of time the partnership has been underway. Describe and list the business groups, community groups, and individuals involved. Explain the role of the advisory group in the grant initiative and implementation and the matching support, including in-kind, to be provided.

E. Management/ Implementation (15 points)
1. Management. Outline the management structure of the program, how it fits within the school/district. Include key job descriptions.

2. Implementation. Explain how the initiative will be supported by the school/district and supported by the community advisory group. Provide evidence the school/district and community have the capacity to initiate and sustain the model. Will other programs, activities be integrated with this grant initiative? Explain how this initiative supports the school/district strategic plan.

3. Budget. Give the TOTAL amount of the grant request for FY 2014-15. Provide evidence of the ability to meet the grant match. If the grant program is continued for a second and third

year, what grant amounts might be requested each year? Provide a budget narrative for FY 2014-15 using the following chart. And, if there are costs related to future budget years, please complete charts for 2015-16 and 2016-17.

Budget Summary for 2014-15

Categories	Grant Funds	Match Funds	Total Cost
Salaries			
Benefits			
Purchased Services (including travel, professional development, etc.)			
Supplies			
Equipment			
Total			

Collaborating Partner(s) and Amount(s) or In-Kind Support provided by each in 2014-15:

_____ $_____

_____ $_____

_____ $_____

Budget Summary for 2015-16

Categories	Grant Funds	Match Funds	Total Cost
Salaries			
Benefits			
Purchased Services (including travel, professional development, etc.)			
Supplies			
Equipment			
Total			

Budget Summary for 2016-17

Categories	Grant Funds	Match Funds	Total Cost

Salaries			
Benefits			
Purchased Services (including travel, professional development, etc.)			
Supplies			
Equipment			
Total			

F. Evaluation (15 total points)

1. Reporting. Define the methods to be used to report on the impact of the initiative on students and, if appropriate, on faculty and the community. Document measures or evidence to be collected to demonstrate the impact of the initiative or model on student learning and on other factors?

2. Program implementation. Outline the methods to be used and data collected for determining the degree of implementation of program design and any difficulties/successes impacting the achievements of the initiative.

D. Assurances

The applicant must include signed and notarized assurances from the (1) chair of the local school board of trustees or board of a charter school; (2) the district superintendent, if applicable; (3) the principal of the school or schools, if applicable; (4) the School Improvement Council(s); and (5) the community advisory committee supporting the application and guaranteeing that:

(a) funds received from the South Carolina Community Block Grants for Education Pilot Program and all matching funds will be used exclusively to implement the initiative or model. Funds may not be transferred to any other purpose; and

(b) The applicant will provide reports documenting implementation and evaluation as prescribed in any grant award, including financial disclosures as required.

Appendix C.
Timeline for Grants Process

SC EDUCATION OVERSIGHT COMMITTEE

Reporting facts. Measuring change. Promoting progress.

Timeline for the Community Block Grants for Education Pilot Program

Date	**Description of Activity**
November 2, 2014	EOC Executive Director appoints Grants Committee and solicits confirmation from each member
November 20, 2014	EOC staff sends email correspondence to Grants Committee announcing first meeting
December 16, 2014	Initial meeting with Grants Committee to review legislation Grants Committee to approve timeline, application, and criteria.
December 18, 2014	Dissemination of news release of upcoming block grant opportunity to school districts, education and community partners, School Improvement Councils, Chamber of Commerce, Faith-based organizations
January 5, 2015	Grant applications and process for submitting grant applications emailed to all school district superintendents and school district public information officers
February 13, 2015	Grant applications due from school districts at 5 pm to EOC
February 23, 2015	Grant applications submitted to Grants Committee for initial evaluation
March 6, 2015	Meeting with Grants Committee to discuss grant applications and determine finalists for grant
March 13, 2015	Correspondence sent to grant finalists inviting them to present their grant application to Grants Committee
March 27, 2015	Meeting with grant finalists to present their grant applications to Grant Committee Grants Committee to discuss and determine grant awards to school districts
March 31, 2015	EOC to announce grant recipients and disseminate news release of grantees

Appendix D.
Letter of Invitation

SC EDUCATION OVERSIGHT COMMITTEE

Reporting facts. Measuring change. Promoting progress.

January 5, 2015

Dear Superintendent,

Through a proviso passed last year in the General Assembly, the S.C. Education Oversight Committee is able to make available a grant opportunity for all public schools, including charter schools, schools or a district in South Carolina. The grant, the South Carolina Community Block Grants for Education Pilot Program, was created for the purpose to encourage and sustain partnerships between a community and its local public school district for the implementation of innovative, state-of-the-art education initiatives and models to improve student learning. The initiatives and models funded by the grant must be well designed, based on strong evidence of effectiveness, and have a history of improved student performance. The specifics of the grants are as follows.

Grant Award- May not exceed $250,000 unless the grants committee finds exceptional circumstances warrant greater amount.

The grant is due to the S.C. Education Oversight Committee on February 13, 2015. The grant awards are expected to be announced on March 31, 2015.

Criteria: Applications will be awarded based on the following criteria. Schools and districts with a high poverty and low achievement as measured by state accountability system will be given priority of funding.

(1) The establishment and continuation of a robust community advisory committee to leverage funding, expertise, and other resources to assist the district or school throughout the implementation of the initiatives funded through the Block Grant Program;
(2) A demonstrated ability to meet the match throughout the granting period;
(3) A demonstrated ability to implement the initiative or model as set forth in the application;
(4) An explanation of the manner in which the initiative supports the district's or school's strategic plan required by Section 59-18-1310 of the 1976 Code;
(5) A comprehensive plan to examine the implementation and measure the impact of the model; and
(6) A report on implementation problems and successes and impact of the innovation or model.

Grant applications will be reviewed and selected by an independent Grants Committee composed of educators and members of the business community.

Match Requirement: The school or district must match the grant between 10 and 70% to be based on the poverty index of the school. The required match may be met by funds or by in-kind donations, such as technology.

The match required from a grant recipient is based on the poverty of the district or school. No matching amount will exceed more than seventy percent of the grant request or be less than ten percent of the request. Public school districts and schools that have high poverty and low achievement will receive priority for grants when their applications are judged to meet the criteria established for the grant program.

GRANT SUBMISSION- The grant application is due in the office of the South Carolina Education Oversight Committee on **Friday, February 13, 2015 at 5 pm**. The application is attached. The assurance for award document is also attached, which must be completed with the appropriate signatures and notarized. Please note the assurance for award must accompany the grant application.

You may scan and email the application and assurances to XXXX. Or if you wish to mail or hand deliver the application and assurances to the EOC, the address is XXX.

GRANT PERIOD- The grant period will be from April 1, 2015 through June 30, 2016.

The Education Oversight Committee is pleased to be able to work with school districts to promote partnerships between communities and schools to improve student learning. Should you have any questions or need clarification regarding this grant opportunity, please contact Rainey Knight at raineyhk@gmail.com or 843.230.6360.

Sincerely,

Melanie Barton
Executive Director, Education Oversight Committee

Cc: Grants Application
Assurances For Award document

Appendix E.
Grant Reviewer's Evaluation Form

Project Details	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**
	District Poverty Index								
A. Needs Assessment (10 points maximum)									
B. Goals and Objectives (15 points maximum)									
C. Initiative Design (20 points maximum)									
D. Community Advisory Group (20 points maximum)									
E. Leadership Implementation (20 points maximum)									
F. Evaluation (15points maximum)									

Total Points (out of possible 100 points)									

Reviewer Number _____

Appendix F.
News Release

from the South Carolina Education Oversight Committee
P.O. Box 11867, Room 502 Brown Building
Columbia, South Carolina, 29211
Contact: Dana Yow, (803) 734-6164

For Immediate Release

March 31, 2015

Five South Carolina school districts awarded grants for innovation

Columbia – Five South Carolina school districts – Beaufort; Charleston; Clarendon 1; Colleton; and Jasper County School Districts, are the 2015 recipients of the South Carolina Community Block Grants for Education. The pilot program, which was only open to school districts in the state, is a matching grants program designed to encourage sustainable partnerships among school districts and community groups.

Proviso 1.94 of the 2014-15 General Appropriation Act created the program, which is focused on "state-of-the-art education initiatives and models to improve students learning." The proviso allocated $1 million in one-time funds for the program although school districts were required to provide matching financial support.

The five winning school districts were chosen from 37 applications received. A seven-member review committee, composed of representatives from the business and education committee appointed by the Executive Director of the SC Education Oversight Committee (EOC), made the final decision on grant recipients after meeting with eight finalists. The independent grants committee placed priority on districts with higher percentages of students living in poverty. The impact of the innovative programs will be measured and reported publicly so that lessons learned could be replicated in other districts in the state.

"We are so pleased to recognize these districts for their innovative projects focused on helping children learn," said Dr. Allison Jacques, Assistant Dean for Assessment at the University of South Carolina School of Education and chair of the grants committee. "Our hope is that these projects become models of how schools and communities can unite to handle challenges and create positive outcomes for students and families."

Summaries of the awarded projects:

Beaufort Community Learning Program
Beaufort County School District
The Beaufort Community Learning Program is a neighborhood-based education and tutoring program focused on improving the academic achievement of at least 100 students in a high-poverty section of downtown Beaufort. The program, which operates outside of regular school

hours during the afternoons, weekends, and during the summer, includes evidence-based practices aimed at improving achievement, attendance, family engagement, and behavior. An innovative part of the program is that it takes place in the neighborhoods where the children and families live, alleviating the need for additional transportation costs. The school district was awarded $163,500, the amount requested.

Charleston Promise Neighborhood Learning Community
Charleston County School District
The Charleston Promise Neighborhood Learning Community is a public-private partnership between Charleston County School District and The Charleston Promise Neighborhood, a non-profit organization that serves the needs of a 5.6 mile area in Charleston County that is one of the most impoverished, high-crime areas in the state. The Charleston Promise Neighborhood Learning Community will extend the school day by three hours for over 1,000 students at two of the four elementary schools in located within the Promise neighborhood zone. The expanded-day will be built on a STEAM (Science, Technology, Engineering, Art, Math) model that is currently being piloted in one Charleston school. The overall goals of the program are to improve student behavior, motivation, achievement, and increase community involvement in the implementation of school initiatives. The school district was awarded $249,595, the amount requested.

STEM Initiative
Clarendon School District One
The STEM- (Science, Technology, Engineering, Math) focused project establishes two academies within the school district focusing on environmental science and providing learning experiences in STEM. The goal of establishing the academies is to increase student achievement in science and math. The initiative is also designed to implement a high-quality professional development model that will prepare teachers to deliver a comprehensive, challenging STEM education to students. The school district was awarded $242,237, a slight decrease from the requested amount of $250,000.

First Lego League (FLL) ACEbotics program (ACEbotics)
Colleton County School District
The ACEbotics program, which involves approximately 150 fourth and fifth grade students in elementary schools in Colleton County School District, includes a summer camp and an afterschool program which will allow students to have fun while learning to design, build, test, and program robots with an emphasis on STEM (Science, Technology, Engineering, and Math). The goal of the program is to assist students in the district who are under-performing in math and science. The school district was awarded $144,668, the amount requested.

STEM Afterschool and Summer Enrichment Program
Jasper County School District
This STEM (Science, Technology, Engineering, Math) program is designed to increase student learning in math and science by providing a trans-disciplinary approach to curricula that stresses hands-on learning, project-based lessons, exploration and collaborative efforts with real-world applications in STEM fields. The program, which utilizes *Project Lead the Way* curriculum, will involve approximately 150 students at Hardeeville-Ridgeland Middle School in Jasper County. The school district was awarded $200,000 a decrease from the requested amount of $250,000.

The SC Education Oversight Committee is an independent, non-partisan group made up of 18 educators, business persons, and elected leaders. Created in 1998, the committee is

dedicated to reporting facts, measuring change, and promoting progress within South Carolina's education system.

Appendix G.
Assurance Award letter

SC EDUCATION OVERSIGHT COMMITTEE
Reporting facts. Measuring change. Promoting progress.

As the duly authorized representative of

_____
(Please print or type name of applicant)

I certify that:
A. Funds received from the Education Oversight Community Block Grant for Education Pilot Program and all matching funds will be used exclusively to implement the initiative or model. Funds may not be transferred to any other purpose.
B. The applicant will provide reports documenting implementation and evaluation as prescribed in any grant award, including financial disclosures as required.
C. The applicant will agree to present and share its grant project and the accompanying outcomes with its school board, School Improvement Council, the community advisory committee and with local, regional and state educational, community and business groups.
D. The applicant will agree to make its grant project and results available as a public document.

The signatures below must be notarized. Please note this form MUST be submitted with the grant application.

Chair, School Board of Trustees

Superintendent, School District

Principal of School(s)

Chairman, School Improvement Council(s)

Community Action Committee

Appendix H.
Newspaper opinion

neighborhood outreach connection

MarketWatch
THE WALL STREET JOURNAL.

Opinion: Money is not the answer for our bloated public education system
By Diana Furchtgott-Roth
Published: Aug 29, 2014 8:17 a.m. ET

An efficiently run, volunteer-led program in South Carolina shows why

HILTON HEAD, S.C. (MarketWatch) — As kids return to school, many sincere education specialists see that the way to improve student achievement is to put more resources in schools. Another approach is to bring education closer to the home, and the home community, the model pioneered by the Neighborhood Outreach Connection in South Carolina's Low Country. When NOC, as the group is known, comes to a community, test scores go up and crime rates go down.

America spends, and has for many years spent, more on education per student than any other country in the world, according to the Department of Education. Yet according to the international Programme for International Student Assessment tests, average American student achievement is only mediocre. Contrary to what many education advocates argue, increased spending by itself has not and will not help.

Neighborhood Outreach Connection, the brainchild of Narendra Sharma, a retired World Bank economist from Fiji with 32 years of experience, is bringing services such as tutoring, mobile health units and entrepreneurship initiatives directly to six low-income communities in South Carolina's Low Country. By purchasing apartments in low-income housing developments and converting them into classrooms, NOC is succeeding in raising the academic performance among some of the poorest students in the state and the country.

Because it is located in the community rather than in the school, NOC is there for the kids when they get off the bus. Sharma gets to know the residents, and they know him. He hears about their problems first-hand, such as residents who had no heat in their apartment but who did not know enough to complain.

I visited two housing units in Cordillo Courts, a low-income development a mile from some of the most beautiful homes on the island. It is tucked behind some trees, and few tourists, or residents, know it exists. NOC purchased the units and refurbished them as freshly painted classrooms, where tutoring will begin on Sept. 8. The yellow-and-blue rooms held folding tables and chairs that can be reconfigured for different groups, and stacks of laptops.

Oscar Cardozo, a maintenance worker in his 50s from Argentina, had just repaired the broken air-conditioning unit that cooled one of the two apartments. He told me: "La educación es lo solo que va a cambiar la gente." ("Education is the only way to change people.") He tells the children at Cordillo Courts that getting good grades is their pathway to a better life.

Neighborhood Outreach Connection serves 200 elementary school children in six communities in Beaufort County. Children get off the bus and go directly to apartments converted into classrooms, where they get a healthy snack (Michelle Obama would approve) and sit down with professional teachers from the school system to do their homework. Many do not have computers at home, and the laptops in the classrooms are their only opportunity to do computer assignments.

The project gets results. In 2012, NOC summer-school students scored an average of 56.7% in reading versus 43.7% for non-NOC students, and 51.1% in math versus 48.1% for non-NOC students.

When NOC began a program in 2009 at the Oaks in Hilton Head, the Beaufort County Sheriff's Office reported 82 offenses in the housing development. By 2012, offenses fell to 55, a decline of 30%.

In the evenings, the classrooms are used to teach English to non-English-speaking parents. Mobile trucks come several times a year for health and dental screenings, with NOC covering the costs of the health tests. NOC also has classes in entrepreneurship, showing people how to set up businesses in construction or selling jewelry online.

South Carolina is close to the bottom of the 50 states in the National Assessment of Educational Progress tests. Sharma told me: "It is frightening that the achievement gap is very significant in Hilton Head, one of the richest municipalities in the state. Why don't we educate our children here?"

Neighborhood Outreach Connection's after-school and summer programs increase the school year by the equivalent of 28 days for those students who are signed up. The budget for fiscal 2014 was $304,000, about $1,520 per student. Sharma would like to expand the program in a number of ways. He would like to open the classrooms to add middle-school children during the week, and middle- and high-school students on the weekends.

The cost of opening Cordillo Courts on the weekend to serve two dozen students would be $320 per day, or $640 per weekend. That is about $33,000 a year. Expanding opening hours during the week during the academic year would cost another $14,000.

Small efforts make a big difference. The NOC students work in partnership with the Beaufort County school district, and score better than their peers in reading and math. It might be more cost-efficient for Beaufort County to fund NOC's programs rather than invest in remedial education programs of its own.

In the past 50 years, school funding in America has exploded, with few measurable results for student achievement. The annual per-student cost of primary and secondary education in America is over $13,000. After adjusting for inflation, this amounts to an increase of 239% over the past half-century.

A Department of Education report found there is only an 8% difference between revenues received per student in the highest-poverty districts versus the richest districts. Yet gaps in student achievement persist, despite the best intentions of federal policy makers.

From 1970 to 2012, the public school workforce nationwide has almost doubled, while student enrollment has gone up by less than 10%. Many of those new hires are not teaching students. Half of all public school staff now work in non-teaching roles. Their salaries account for a quarter of educational expenditures.

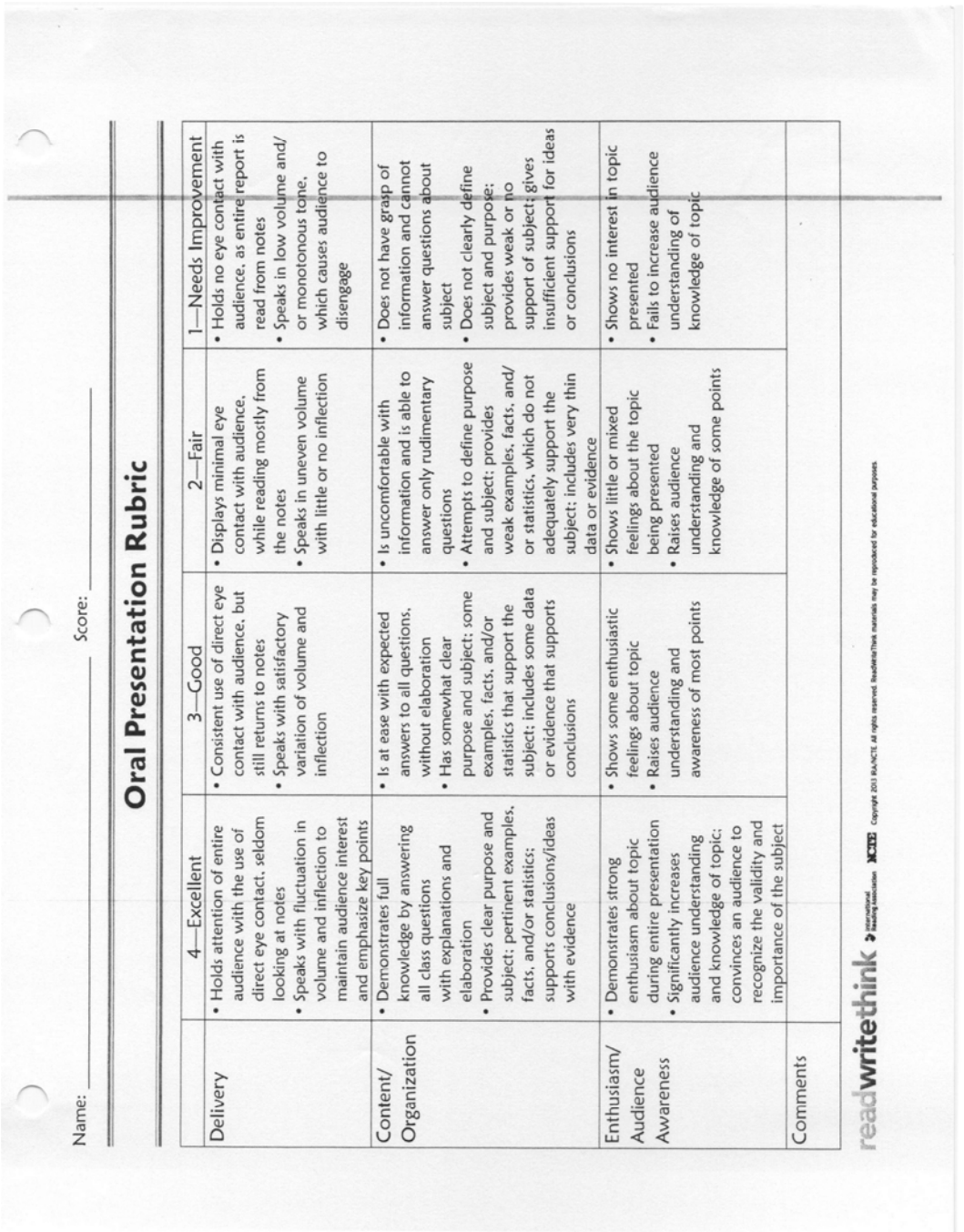
Support staff alone make up 30% of school employees. Since 1993, the number of teachers for every 1,000 public students has increased by 5 percentage points. Over that same time, the number of non-teachers per 1,000 students rose 11 percentage points, according to the Thomas B. Fordham Institute.

Sharma told me: "We need to scale up our efforts to reach more low-income neighborhoods so that we can have greater impact. NOC needs to raise $1 million to expand its programs over the next three years. We can make a difference by creating pathways for our high-risk children so they can be successful in life."

The new classrooms that will open Sept. 8 in Cordillo Courts, with their banks of laptop computers, gives hope for the future — as well as frustration with the present. American students suffer not because we spend too little, but because we spend unwisely. With relatively meager resources — $300,000 — NOC, a non-governmental volunteer group, is helping 200 of the poorest students in America get ahead. America spends hundreds of billions of dollars on often disappointing public school education; for a fraction of that, Sharma and NOC could help many students actually get ahead.

American public education does not need more money. Instead, it needs to spend some of its current funds on more Neighborhood Outreach Connections.

Appendix I.
Clarendon 1 Rubric for Oral Presentations



Name: _____ Score: _____

Oral Presentation Rubric

	4—Excellent	3—Good	2—Fair	1—Needs Improvement
Delivery	• Holds attention of entire audience with the use of direct eye contact, seldom looking at notes • Speaks with fluctuation in volume and inflection to maintain audience interest and emphasize key points	• Consistent use of direct eye contact with audience, but still returns to notes • Speaks with satisfactory variation of volume and inflection	• Displays minimal eye contact with audience, while reading mostly from the notes • Speaks in uneven volume with little or no inflection	• Holds no eye contact with audience, as entire report is read from notes • Speaks in low volume and/or monotonous tone, which causes audience to disengage
Content/ Organization	• Demonstrates full knowledge by answering all class questions with explanations and elaboration • Provides clear purpose and subject; pertinent examples, facts, and/or statistics; supports conclusions/ideas with evidence	• Is at ease with expected answers to all questions, without elaboration • Has somewhat clear purpose and subject; some examples, facts, and/or statistics that support the subject; includes some data or evidence that supports conclusions	• Is uncomfortable with information and is able to answer only rudimentary questions • Attempts to define purpose and subject; provides weak examples, facts, and/or statistics, which do not adequately support the subject; includes very thin data or evidence	• Does not have grasp of information and cannot answer questions about subject • Does not clearly define subject and purpose; provides weak or no support of subject; gives insufficient support for ideas or conclusions
Enthusiasm/ Audience Awareness	• Demonstrates strong enthusiasm about topic during entire presentation • Significantly increases audience understanding and knowledge of topic; convinces an audience to recognize the validity and importance of the subject	• Shows some enthusiastic feelings about topic • Raises audience understanding and awareness of most points	• Shows little or mixed feelings about the topic being presented • Raises audience understanding and knowledge of some points	• Shows no interest in topic presented • Fails to increase audience understanding of knowledge of topic
Comments				

Appendix J.
Rubric for First League Lego Robotics

FIRST® LEGO® League

Robot Design **Team Number**

Judging Room

Directions: For each skill area, clearly mark the box that best describes the team's accomplishments. If the team does not demonstrate skill in a particular area, then put an 'X' in the first box for Not Demonstrated (ND). Please provide as many written comments as you can to acknowledge each team's hard work and to help teams improve. *When you have completed the evaluation, please circle the team's areas of strength.*

		Beginning	Developing	Accomplished	Exemplary
Mechanical Design	**Durability**	Evidence of structural integrity; ability to withstand rigors of competition			
	ND	quite fragile; breaks a lot	frequent or significant faults/repairs	rare faults/repairs	sound construction; no repairs
	Mechanical Efficiency	Economic use of parts and time; easy to repair and modify			
	ND	excessive parts or time to repair/modify	inefficient parts or time to repair/modify	appropriate use of parts and time to repair/modify	streamlined use of parts and time to repair/modify
	Mechanization	Ability of robot mechanisms to move or act with appropriate speed, strength and accuracy for intended tasks (propulsion and execution)			
	ND	imbalance of speed, strength and accuracy on most tasks	imbalance of speed, strength and accuracy on some tasks	appropriate balance of speed, strength and accuracy on most tasks	appropriate balance of speed, strength and accuracy on every task

Comments:

Programming	**Programming Quality**	Programs are appropriate for the intended purpose and would achieve consistent results, assuming no mechanical faults			
	ND	would not achieve purpose AND would be inconsistent	would not achieve purpose OR would be inconsistent	should achieve purpose repeatedly	should achieve purpose every time
	Programming Efficiency	Programs are modular, streamlined, and understandable			
	ND	excessive code and difficult to understand	inefficient code and challenge to understand	appropriate code and easy to understand	streamlined code and easy for anyone to understand
	Automation/Navigation	Ability of the robot to move or act as intended using mechanical and/or sensor feedback (with minimal reliance on driver intervention and/or program timing)			
	ND	frequent driver intervention to aim AND retrieve robot	frequent driver intervention to aim OR retrieve robot	robot moves/acts as intended repeatedly w/ occasional driver intervention	robot moves/acts as intended every time with no driver intervention

Comments:

Strategy & Innovation	**Design Process**	Ability to develop and explain improvement cycles where alternatives are considered and narrowed, selections tested, designs improved (applies to programming as well as mechanical design)			
	ND	organization AND explanation need improvement	organization OR explanation need improvement	systematic and well-explained	systematic, well-explained and well-documented
	Mission Strategy	Ability to clearly define and describe the team's game strategy			
	ND	no clear goals AND no clear strategy	no clear goals OR no clear strategy	clear strategy to accomplish the team's well defined goals	clear strategy to accomplish most/all game missions
	Innovation	Creation of new, unique, or unexpected feature(s) (e.g. designs, programs, strategies or applications) that are beneficial in performing the specified tasks			
	ND	original feature(s) with no added value or potential	original feature(s) with some added value or potential	original feature(s) with the potential to add significant	original feature(s) that add significant value

Comments:

Strengths: **Mechanical Design** **Programming** **Strategy & Innovation**

Appendix K.
Design Team Rubric

Design Challenge Evaluation Rubric

Middle School and High School Design Packet

Group Members: _____

_____

Rubric Category	***Score***
Brainstorm to Identify the Problem and Constraints • The problem is identified and explained in detail. • All criteria and constraints are listed and clarified. • Possible solutions are listed from the brainstorming session. • The work others have done to solve the problem is included.	
Generate Ideas, Possibilities, and Design Choice • Two or three ideas are selected from brainstormed list. • Detailed sketches are created for the selected ideas. • Sketches are labeled with dimensions and materials for each component. • One design is selected to construct with reasons for the choice.	
Build the Model or Prototype • Detailed list of materials is included. • Detailed procedures are included and followed. • Materials are handled and stored appropriately. • Safety rules are followed.	
Test the Model and Evaluate • Hypothesis following an "if.., then..." format is developed for the design. • Strengths of the design are listed. • Weaknesses of the design or compromises of the design are listed. • Results are accurately recorded. • Data tables are complete and well organized. • The chosen design effectively addresses the identified problem.	
Refine the Design • Modifications to improve the design are based on test results. • Modifications to the design are documented. • Additional trials are conducted. • Reflections show great insight and understanding of process and goals of project.	
Share the Design • Presentation is well-organized. • Presentation covers all areas of the design process. • Presentation is clearly communicated (verbally or visually) with appropriate data, sketches, graphs or pictures. • Presentation includes contributions from all team members.	
TOTAL (out of 24 pts possible)	

4 (Excellent) = All criteria (procedures, steps, and details) are met or followed with rare mistakes.
3 (Good) = Most criteria are met with only a few mistakes.
2 (Fair) = Many criteria are not met and/or there are many mistakes.
1 (Poor) = Most criteria are not met.
0 (No effort) = No effort to meet criteria.

8

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